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UNITED STATES
AIR FORCE

OCCUPATIONAL SURVEY REPORT

AIRCRAFT GUIDANCE AND CONTROL SYTEMS
AFSC 2A4X1

OSSN: 2307

SEPTEMBER 1998

OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
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TABLE OF CONTENTS

PAGE NUMBER

PREFACE ix

SUMMARY OF RESULTS xi

INTRODUCTION 1

Background 1

SURVEY METHODOLOGY 2

Inventory Development 2
Survey Administration 2
Survey Sample 3
Task Factor Administration 5

SPECIALTY JOBS 6

Overview of Specialty Jobs 6
Group Descriptions 8

ANALYSIS OF DAFSC GROUPS 16

Skill-Level Descriptions 16
Summary 17

TRAINING ANALYSIS 36

First-Enlistment Personnel 36
Training Emphasis (TE) and Task Difficulty (TD) Data 41
Specialty Training Standard (STS) 43

JOB SATISFACTION ANALYSIS 47

IMPLICATIONS 51

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TABLE OF CONTENTS
(Tables, Figures, Appendices)

		PAGE NUMBER
TABLE 1	DAFSC DISTRIBUTION OF SURVEYED PERSONNEL	3
TABLE 2	PAYGRADE/COMMAND DISTRIBUTION OF SURVEY SAMPLE	4
TABLE 3	RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS	13
TABLE 4	SELECTED BACKGROUND DATA FOR SPECIALTY JOBS	14
TABLE 5	SPECIALTY JOB COMPARISON BETWEEN CURRENT AND 1994 SURVEYS	15
TABLE 6	DISTRIBUTION OF 3-SKILL LEVEL DAFSC GROUP MEMBERS ACROSS SPECIALTY JOBS (PERCENT RESPONDING)	18
TABLE 7	DISTRIBUTION OF 5-SKILL LEVEL DAFSC GROUP MEMBERS ACROSS SPECIALTY JOBS (PERCENT RESPONDING)	19
TABLE 8	DISTRIBUTION OF 7-SKILL LEVEL DAFSC GROUP MEMBERS ACROSS SPECIALTY JOBS (PERCENT RESPONDING)	20
TABLE 9	RELATIVE PERCENT TIME SPENT ON DUTIES BY 3-SKILL LEVEL DAFSC GROUPS	21
TABLE 10	RELATIVE PERCENT TIME SPENT ON DUTIES BY 5-SKILL LEVEL DAFSC GROUPS	22
TABLE 11	RELATIVE PERCENT TIME SPENT ON DUTIES BY 7-SKILL LEVEL DAFSC GROUPS	23
TABLE 12	REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 2A431 PERSONNEL	24
TABLE 13	REPRESENTATIVE TASKS PERFORMED BY ALL 2A451 PERSONNEL	25
TABLE 14	REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 2A451 PERSONNEL	26
TABLE 15	REPRESENTATIVE TASKS PERFORMED BY AFRC 2A451 PERSONNEL	27
TABLE 16	TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY DAFSCs 2A431 AND 2A451 PERSONNEL (PERCENT MEMBERS PERFORMING)	28

TABLE OF CONTENTS (CONTINUED)
(Tables, Figures, Appendices)

		PAGE NUMBER
TABLE 17	TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY AND AFRC DAFSC 2A451 PERSONNEL (PERCENT MEMBERS PERFORMING)	29
TABLE 18	REPRESENTATIVE TASKS PERFORMED BY ALL 2A471 PERSONNEL	30
TABLE 19	REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 2A471 PERSONNEL	31
TABLE 20	REPRESENTATIVE TASKS PERFORMED BY AFRC 2A471 PERSONNEL	32
TABLE 21	TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY DAFSCs 2A451 AND 2A471 PERSONNEL (PERCENT MEMBERS PERFORMING)	33
TABLE 22	TASKS WHICH BEST DIFFERENTIATE BETWEEN AFRC DAFSCs 2A451 AND 2A471 PERSONNEL (PERCENT MEMBERS PERFORMING)	34
TABLE 23	TASKS WHICH BEST DIFFERENTIATE BETWEEN ACTIVE DUTY AND AFRC DAFSC 2A471 PERSONNEL (PERCENT MEMBERS PERFORMING)	35
TABLE 24	RELATIVE PERCENT TIME SPENT ON DUTIES BY ACTIVE DUTY FIRST-ENLISTMENT PERSONNEL (N=322)	38
TABLE 25	REPRESENTATIVE TASKS PERFORMED BY AFSC 2A4X1 ACTIVE DUTY FIRST- ENLISTMENT PERSONNEL (N=322)	39
TABLE 26	TEST EQUIPMENT USED BY ACTIVE DUTY FIRST-ENLISTMENT AFSC 2A4X1 PERSONNEL	40
TABLE 27	TASKS RATED HIGHEST IN TASK DIFFICULTY	42
TABLE 28	EXAMPLES OF TECHNICAL TASKS PERFORMED BY AFSC 2A4X1 GROUP MEMBERS SUGGESTED FOR PROFICIENCY CODE REVIEW TO PERFORMANCE CODING (PERCENT MEMBERS PERFORMING)	44
TABLE 29	EXAMPLES OF STS ITEMS NOT SUPPORTED BY ACITVE DUTY SURVEY DATA (LESS THAN 20 PERCENT MEMBERS PERFORMING)	45
TABLE 30	EXAMPLES OF TECHNICAL TASKS PERFORMED BY 30 PERCENT OR MORE GROUP MEMBERS AND NOT REFERENCED TO THE STS	46

TABLE OF CONTENTS (CONTINUED)
(Tables, Figures, Appendices)

PAGE NUMBER

TABLE 31 COMPARISON OF JOB SATISFACTION INDICATORS BY TAFMS GROUPS ...48
(PERCENT MEMBERS RESPONDING)

TABLE 32 COMPARISON OF CURRENT SURVEY AND PREVIOUS SURVEY BY.....49
TAFMS GROUPS (PERCENT MEMBERS RESPONDING)

TABLE 33 COMPARISON OF JOB SATISFACTION INDICATORS BY ACTIVE.....50
DUTY SPECIALTY JOBS (PERCENT MEMBERS RESPONDING)

FIGURE 1 AFSC 2A1X2/2A4X1 CAREER LADDER SPECIALTY JOBS (N=2,131).....7

FIGURE 2 DISTRIBUTION OF 2A4X1 FIRST-ENLISTMENT PERSONNEL.....37
ACROSS SPECIALTY JOBS (N=322)

APPENDIX A SELECTED REPRESENTATIVE TASKS PERFORMED BY SPECIALTY 52
JOB GROUPS

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PREFACE

This report presents the results of an Air Force Occupational Survey of the Aircraft Guidance and Control career ladder, Air Force Specialty Code (AFSC) 2A4X1. Authority for conducting occupational surveys is contained in AFI 36-2623. Computer products used in this report are available for use by operations and training officials.

The survey instrument was developed by Mr. Michael Brosnan. Computer programming support was provided by Ms. Rebecca Hernandez. Mr. Robert E. Boerstler, Jr. analyzed the data and wrote the final report. This report has been reviewed and approved by Lt Col Roger W. Barnes, Chief, Airman Analysis Section, Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS).

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies are available upon request to AFOMS/OMYXI, 1550 5th Street East, Randolph Air Force Base, Texas 78150-4449, or by calling DSN 487-5543. For information on the Air Force occupational survey process or other on-going projects, visit our web site at http://www.omsq.af.mil.

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SUMMARY OF RESULTS

1. **Survey Coverage**: AFSCs 2A1X2 and 2A4X1 were surveyed to provide current job and task data for use in updating career ladder documents and training programs. Survey results are based on responses from 2,131 Active Duty (AD), Air National Guard (ANG), and Air Force Reserve Command (AFRC) respondents across both career ladders, accounting for 60 percent of the total population surveyed. The majority of this specific report, however, will primarily focus on members in AFSC 2A4X1, Aircraft Guidance and Control Systems.

2. **Specialty Jobs**: The specialty job analysis associated with this report included respondents from both career ladders. Three jobs and 3 clusters were identified, accounting for 92 percent of the total sample. The remaining 8 percent, for one reason or another, did not group into one of these jobs or clusters. The Flightline Maintenance Cluster is the predominant job or cluster accounting for 72 percent of the survey population.

3. **Career Ladder Progression**: Skill-level progression for members of this AFSC is typical, with a move from technical work at the 3- and 5-skill levels to supervisory and management work beginning at the 7-skill level. Members spend less time on technical tasks as they progress through the skill levels. Air Force Reserve Command respondents remain much more technically oriented than their Active Duty counterparts.

4. **Training Analysis**: The current STS provides comprehensive coverage of the work performed by career ladder personnel. Some STS elements warrant review of proficiency coding based on survey data. Few tasks were not referenced to the STS.

5. **Job Satisfaction**: Job satisfaction among AFSC 2A4X1 personnel is fairly high for first-enlistment and second-enlistment personnel and slightly lower for career personnel when compared to responses from like AFSCs surveyed in the past year. Job satisfaction remained fairly stable since the previous OSR was conducted in 1994. Reenlistment intentions for first-enlistment and career groups are comparable to like AFSCs, while second-enlistment group reenlistment intentions are 12 percent lower. Reenlistment intentions are much lower than the previous survey (15-20 percent) for first- and second-enlistment airmen.

6. **Implications**: Survey results indicate that the present classification structure, as described in the latest specialty description, accurately portrays the jobs by members of this career ladder. Career ladder training documents appear, on the whole, to be well supported by survey data, but require review to ensure appropriate proficiency coding. Job satisfaction is fairly high when compared to the comparative sample of like AFSCs. Reenlistment intentions have declined markedly for first- and second-enlistment personnel since the previous survey in 1994.

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OCCUPATIONAL SURVEY REPORT (OSR)
AIRCRAFT GUIDANCE AND CONTROL SYSTEMS
(AFSC 2A4X1)

INTRODUCTION

This is an Occupational Survey Report (OSR) of two Air Force Specialty Codes (AFSCs), the 2A1X2, Avionics Guidance and Control Systems and 2A4X1, Aircraft Guidance and Control Systems career ladders conducted by the Air Force Occupational Measurement Squadron (AFOMS).

For presentation purposes, however, separate OSRs were written for each of the surveyed career ladders. As a result, this specific report concentrates substantially on the AFSC 2A4X1, Aircraft Guidance and Control Systems career ladder. Authority for conducting occupational surveys is contained in AFI 36-2623. Computer products used in this report are available for use by operations and training officials.

The current Avionics Guidance and Control career ladder was created in October 1993 with the conversion from AFSC 453X1 to AFSC 2A4X1. Survey data will be used to identify current utilization patterns among career ladder personnel and evaluate career ladder documents and training programs. The last OSR published for the Avionics Guidance and Control career ladder was March 1994.

Background

As described in the AFMAN 36-2108, *Airman Classification,* 11 March 1998, *Specialty Description*, dated 30 April 1994, Avionics Guidance and Control personnel perform organizational-level maintenance on avionics guidance and control systems and maintain aircraft avionics guidance and control systems and associated support equipment.

Personnel entering the AFSC 2A4X1 career ladder must attend the Aircraft Guidance and Control Apprentice course at Keesler AFB MS lasting 110 academic days. Upon completion of this AFSC awarding course, the graduate is awarded the 3-skill level.

Entry into this career ladder currently requires an Armed Forces Vocational Aptitude Test Battery (ASVAB) score of Electronics - 67; a strength factor of "J" (Weight lift of 60 lbs) is also required.

SURVEY METHODOLOGY

Inventory Development

This survey instrument was developed to include the tasks performed by AFSC 2A1X2, Avionics Guidance and Control Systems and AFSC 2A4X1, Aircraft Guidance and Control Systems personnel. The data collection instrument for this occupational survey was USAF Job Inventory (JI) Occupational Survey Study Number (OSSN) 2307, dated October 1997. A tentative task list was prepared which included tasks for both the 2A1X2 and 2A4X1 AFSCs after reviewing pertinent career ladder publications and directives, pertinent tasks from the previous survey instrument, and data from the last OSR. The preliminary task list was refined and validated through personal interviews with 57 subject-matter experts (SMEs) at the following training location and operational installations:

BASE	UNIT VISITED
Keesler AFB MS	332 TRS
Travis AFB CA	60 CRS
Edwards AFB CA	412 CRS
March AFB CA	163 ARW 452 MXS
Hurlburt Field FL	HQ AFSOC
Barnes MAP MA	104 FW
Barksdale AFB LA	2 OG

The resulting JI contains a comprehensive listing of 1,536 tasks grouped under 18 duty headings, and a background section requesting such information as grade, base, MAJCOM assigned, organizational level, component status, job title, functional area, work schedule, test equipment used or operated, aircraft support equipment used or operated, aircraft maintained, and forms used.

Survey Administration

From October 1997 through April 1998, base training offices at operational units worldwide administered the inventory to eligible AFSC 2A1X2 and 2A4X1 personnel. Job incumbents were selected from a computer-generated mailing list obtained from personnel data tapes

maintained by the Air Force Personnel Center, Randolph AFB TX. Each individual who completed the inventory first completed an identification and biographical information section and then checked each task performed in his or her current job. After checking all tasks performed, each member then rated each of these tasks on a 9-point scale, showing relative time spent on that task, as compared to all other tasks checked. The ratings ranged from 1 (very small amount time spent) through 5 (about average time spent) to 9 (very large amount time spent). To determine relative time spent for each task checked by a respondent, all of the incumbent's ratings are assumed to account for 100 percent of his or her time spent on the job and are summed. Each task rating is then divided by the total task ratings and multiplied by 100 to provide a relative percentage of time for each task. This procedure provides a basis for comparing tasks in terms of both percent members performing and average percent time spent.

Survey Sample

Table 1 reflects the percentage of distribution, by Duty AFSC (DAFSC), of assigned AFSC 2A1X2/2A4X1 personnel as of October 1997. The 2,131 respondents in the final sample represent 55 percent of the total assigned personnel and 60 percent of the total personnel surveyed. Table 2 reflects the paygrade and MAJCOM distribution for this study.

TABLE 1

DAFSC DISTRIBUTION OF SURVEYED PERSONNEL

DAFSC	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
2A132	2	2
2A152	23	21
2A172	12	12
2A431	13	12
2A451	35	35
2A471	15	18

TOTAL ASSIGNED* = 3,873
TOTAL SURVEYED** = 3,538
TOTAL IN SURVEY SAMPLE = 2,131
PERCENT OF ASSIGNED IN SAMPLE = 55%
PERCENT OF SURVEYED IN SAMPLE = 60%

* Assigned strength as of November 1997

** Excludes personnel in PCS, student, or hospital status, or less than 6 weeks on the job

TABLE 2

PAYGRADE/COMMAND DISTRIBUTION OF SURVEY SAMPLE

PAYGRADE	2A1X2		2A4X1	
	Percent of Assigned	Percent of Sample	Percent of Assigned	Percent of Sample
E-1 – E-3	4	5	16	17
E-4	21	21	25	23
E-5	36	35	32	32
E-6	25	25	18	19
E-7	14	14	9	9
COMMAND	**2A1X2**		**2A4X1**	
	Percent of Assigned	Percent of Sample	Percent of Assigned	Percent of Sample
AMC	7	9	34	38
AFSOC	6	6	10	8
ACC	5	6	21	21
AETC	3	3	7	8
AFMC	2	2	2	2
USAFE	1	1	2	2
PACAF	1	1	4	5
AFRC	23	24	20	16
ANG	52	48	0	0

As can be seen from Tables 1 and 2, the DAFSC, Paygrade, and Command distributions of the survey sample are extremely close to the percent assigned. This indicates a high probability that the survey is an accurate representation of the respective populations for these career ladders.

Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information is needed for a complete analysis of the career ladder. To obtain the needed task factor data, selected senior AFSC 2A1X2 and 2A4X1 personnel (generally E-6 or E-7 craftsmen) also completed a second booklet for either training emphasis (TE) or task difficulty (TD). These booklets were processed separately from the JIs. This information is used in a number of different analyses discussed in more detail within the report.

Training Emphasis (TE): TE is a rating of the amount of emphasis that should be placed on tasks in entry-level training. The 83 senior NCOs who completed a TE booklet were asked to select tasks they felt require some sort of structured training for entry-level personnel and then indicate how much training emphasis these tasks should receive, from 1 (extremely low emphasis) to 9 (extremely high emphasis). Structured training is defined as training provided at resident training schools, field training detachments (FTD), mobile training teams (MTT), formal on-the-job-training (OJT), or any other organized training method. Interrater agreement for these 93 raters was unacceptable. Since personnel in both the 2A1X2 and 2A4X1 AFSCs perform both flightline and backshop tasks, the raters could not agree on what tasks rated highest in training importance (this was true even when the data were separated by AFSC). Therefore, the TE data is considered unreliable for further analysis.

Task Difficulty (TD): TD is an estimate of the amount of time needed to learn how to do each task satisfactorily. The 93 senior NCOs who completed TD booklets were asked to rate the difficulty of each task using a 9-point scale (extremely low to extremely high). Interrater reliability was acceptable. Ratings were standardized so tasks have an average difficulty of 5.00 and a standard deviation of 1.00. Any task with a TD rating of 6.00 or above is considered to be difficult to learn.

When used in conjunction with the primary criterion of percent members performing, TE and TD ratings can provide insight into first-enlistment personnel training requirements. Such insights may suggest a need for lengthening or shortening portions of instruction supporting entry-level jobs.

SPECIALTY JOBS

The first step in the analysis process is to identify the structure of the career ladder in terms of the jobs performed by the respondents. The Comprehensive Occupational Data Analysis Program (CODAP) assists by creating an individual job description for each respondent based on the tasks performed and relative amount of time spent on these tasks. The CODAP automated job clustering program then compares all the individual job descriptions, locates the two descriptions with the most similar tasks and time spent ratings, and combines them to form a composite job description. In successive stages, CODAP either adds new members to this initial group, or forms new groups based on the similarity of tasks and time spent ratings.

The basic group used in the hierarchical clustering process is the ***Job***. When two or more jobs have a substantial degree of similarity, in tasks performed and time spent on tasks, they are grouped together and identified as a ***Cluster***. The structure of the career ladder is then defined in terms of jobs and clusters of jobs.

As stated earlier, this OSR will focus primarily on members of the AFSC 2A4X1, Aircraft Guidance and Control career ladder. However, the specialty job structure presented in this section of the report includes respondents from both the 2A1X2 and 2A4X1 career ladders.

Overview of Specialty Jobs

Based on the analysis of tasks performed and the amount of time spent performing each task, five independent jobs and two clusters were identified within the career ladder. Figure 1 illustrates the jobs and clusters performed by AFSC 2A1X2 and 2A4X1 personnel.

A listing of these jobs and clusters is provided below. The stage (ST) number shown beside each title references computer printed information, the letter "N" indicates the number of personnel in each group.

I. FLIGHTLINE MAINTENANCE CLUSTER (ST086, N=1,554)

II. SHOP MAINTENANCE CLUSTER (ST030, N=158)

III. UNMANNED AERIAL VEHICLE (UAV) MAINTENANCE JOB (ST373, N=10)

IV. MANAGEMENT CLUSTER (ST053, N=209)

V. QUALITY ASSURANCE JOB (ST247, N=14)

VI. INSTRUCTOR JOB (ST336, N=16)

The respondents forming these jobs and clusters account for 92 percent of the survey sample. The remaining 8 percent, for one reason or another, did not group into one of these jobs or clusters. Examples of job titles for these personnel include CDC Writer, Security Manager, Quality Manager, LAN Manager, and Resource Manager.

AFSC 2A1X2/2A4X1 CAREER LADDER SPECIALTY JOBS
(N = 2,131)

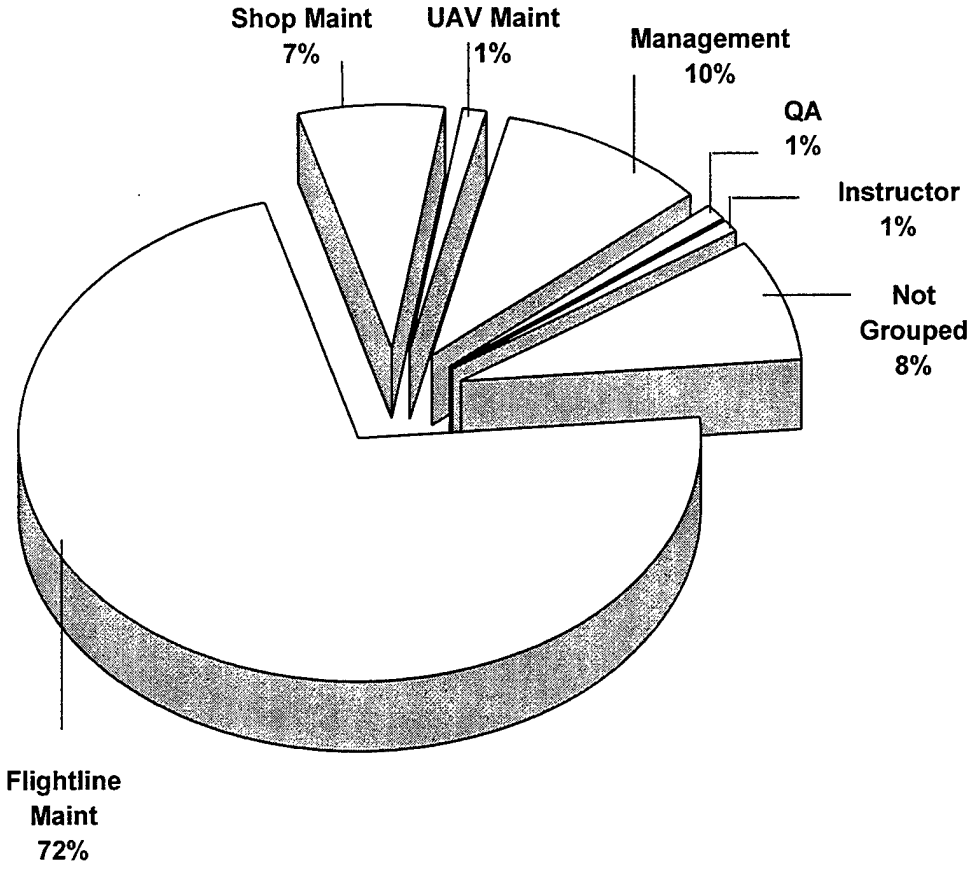

FIGURE 1

Group Descriptions

The following paragraphs contain brief descriptions of the jobs and clusters identified through the career ladder structure analysis. Table 3 presents the relative time spent on duties by members of these specialty jobs and clusters. Selected background data for these jobs and clusters are provided in Table 4. Representative tasks for all the groups are contained in Appendix A. Table 5 shows a job comparison between the current and 1994 surveys.

I. FLIGHTLINE MAINTENANCE CLUSTER (ST086). The 1,554 airmen performing within this cluster (72 percent of the survey sample) represent the core of the career ladder. They spend 51 percent of their time performing the Flight Instrument, Engine Instrument, and Flight Director and Navigation System tasks of Duties B, C, and D (Table 3). They average 286 tasks performed, the highest of any other job or cluster, indicating their diversity in performing the core Guidance and Control systems duties. Distinctive tasks performed include:

- Perform safety wire procedures
- Crimp electrical connections
- Perform leak checks of pitot-static system lines, hoses, or fittings
- Perform operational checks of airspeed indicators
- Repair electrical wiring
- Perform operational checks of altimeters
- Remove or install pitot-static system lines, hoses, or fittings
- Remove or install airspeed indicators
- Perform operational checks of airspeed indicating systems
- Remove or install common electrical system components, such as relays, circuit breakers, or switches
- Remove or install altimeters
- Apply range marks or slippage marks
- Troubleshoot pitot-static system lines, hoses, or fittings

This cluster consists of both 2A1X2 and 2A4X1 personnel. The ANG does not have the 2A4X1 AFSC, utilizing their 2A1X2 personnel for both flightline and backshop functions. The ANG 2A1X2 personnel account for 20 percent of this cluster, with AD and AFRC personnel holding the 2A1X2 specialty comprising another 12 percent (Table 4).

The jobs within this cluster are identified by the type and number of tasks performed maintaining the Guidance and Control systems of the A-10, B-52/U-2, C-5, C-17, C-130, C-141, C/KC-135, and Helicopters.

The predominant paygrades of this cluster are E-5 through E-7 (Table 4). Sixty percent of these airmen are AD, averaging nearly 7½ years in the career field and nearly 8 years in the service. Sixty-eight percent of this cluster hold the 2A4X1 AFSC while 32 percent are 2A1X2 members. Sixty percent report holding the 5-skill level and 24 percent the 7-skill level. Furthermore, 14 percent of these members are assigned to units overseas.

II. <u>SHOP MAINTENANCE CLUSTER (ST030)</u>. The 158 airmen forming this job (7 percent of the survey sample) perform an average of 76 tasks and are distinguished by the 30 percent of their time spent performing the General Guidance and Control Systems tasks of Duty A (Table 3). Although most of the work done by these members is focused on the in-shop activities of AFSC 2A1X2, some members of this group also perform the flightline tasks associated with the 2A4X1 career ladder. Typical of the shop maintenance tasks performed include:

- Solder or desolder electrical components
- Perform electrostatic discharge sensitive device (ESD) safety procedures
- Inspect test equipment
- Crimp electrical connections
- Repair electrical wiring
- Repair crimped pin connectors
- Perform corrosion control procedures
- Troubleshoot test equipment
- Perform safety wire procedures
- Remove or install common electrical system components, such as relays, circuit breakers, or switches
- Repair test equipment
- Repair coaxial cables or connectors
- Fabricate coaxial or triaxial cables
- Repair circuit card assemblies

There were three distinct jobs identified within this cluster, all performing shop maintenance and separated by the tasks pertaining to either the A-10, the E-3/E-4/C-135, or the C-5/C-141 aircraft.

The predominant paygrade of this job is E-4 (Table 4). Seventy-three percent of these airmen are AD, averaging 6 years in the career field and 6½ years in the service. Twenty percent of these members are AFRC and 7 percent ANG. Sixty-eight percent of this cluster report holding the 5-skill level and 16 percent the 7-skill level.

III. UNMANNED AERIAL VEHICLE JOB (ST373). The 10 airmen forming this job (1 percent of the survey sample) are distinguished by the 60 percent of their time spent performing the General Aircraft tasks of Duty N. Although these members perform some Guidance and Control tasks, they mainly perform crew chief duties. They average only 50 tasks performed, indicating their specialization with the UAV. Representative tasks performed by these incumbents include:

- Perform preflight, thruflight, or postflight inspections
- Assist in aircraft weight and balance functions
- Assist in aircraft engine removals or installations
- Perform ground engine runs
- Jack or level aircraft
- Remove or install aircraft wheel and tire assemblies
- Position or remove aircraft chocks
- Launch or recover aircraft
- Perform engine removal preparation procedures
- Inspect aircraft landing gear systems
- Perform safety wire procedures
- Service aircraft tires
- Participate as tow team member or supervisor
- Perform scheduled inspections, such as isochronal, periodic, or phased
- Static ground aircraft

All of these airmen are AD, averaging 3½ years in the career field and 4½ years in the service. The predominant paygrades are E-1 to E-4. Sixty percent hold the 5-skill level and 40 percent the 3-skill level (Table 4).

IV. MANAGEMENT CLUSTER (ST053). The 209 airmen forming this job (10 percent of the survey sample) perform an average of 67 tasks and are distinguished by the 54 percent of their time spent performing the Management and Supervisory tasks of Duty P (Table 3). They spend another 35 percent of their time performing the Maintenance Management, Training, and General Administrative and Technical Order tasks of Duties O, Q, R, and S. Typical of the management and supervisory tasks performed include:

- Inspect personnel for compliance with military standards
- Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting
- Counsel subordinates concerning personal matters
- Supervise military personnel

- Determine or establish work assignments or priorities
- Conduct supervisory performance feedback sessions
- Evaluate personnel for compliance with performance standards
- Interpret policies, directives, or procedures for subordinates
- Write performance reports or supervisory appraisals
- Write recommendations for awards or decorations
- Conduct self-inspections or self-assessments
- Develop or establish work schedules

Sixty-eight percent of these members are 2A4X1 and 32 percent 2A1X2 (Table 4). Eighty-three percent are AD, while 13 percent are AFRC and only 4 percent are ANG. The predominant paygrade for this cluster is E-7 with 84 percent reporting they supervise others. The AD members average almost 15 years in the career field and nearly 16 years in the service.

V. <u>QUALITY ASSURANCE (QA) JOB (ST247)</u>. The 14 members of this job (only 1 percent of the survey sample) are distinguished by the inspection tasks performed in the technical Duties A through M (Table 3). Typical of most aircraft maintenance AFSCs, the QA job is comprised of more experienced technical experts to ensure proper maintenance and safety procedures are followed. Representative tasks include:

- Inspect pitot-static system lines, hoses, or fittings
- Inspect flap position indicating system LRUs
- Inspect airspeed indicating systems
- Inspect airspeed indicators
- Inspect engine tachometer indicating system LRUs
- Inspect flap position indicating systems
- Inspect altimeters
- Inspect oil pressure indicating system LRUs
- Inspect hydraulic pressure indicating system LRUs
- Inspect engine fuel flow indicating system LRUs
- Inspect personnel for compliance with military standards
- Inspect test equipment
- Evaluate job-related suggestions

Seventy-one percent of the members of this job hold the 7-skill level. Seventy-nine percent are AD; while 14 percent are AFRC and 7 percent are ANG. Seventy-two percent of these job incumbents are 2A4X1 and 28 percent are 2A1X2. The predominant paygrades are E-5 to E-7. The AD members of this job average 13½ years in the career field and 14½ years in the service (Table 4).

VI. INSTRUCTOR JOB (ST336). Comprising 1 percent of the survey sample, these 16 airmen report 55 percent of their time performing Training tasks of Duty Q. They also spend 11 percent of their time performing the Management and Supervisory tasks of Duty P and 12 percent performing the General Administrative and Technical Order tasks of Duty S (Table 3). The members of this job perform an average of only 47 tasks, indicating their specialization in instructional duties. Representative of these tasks are:

- Conduct formal course classroom training
- Personalize lesson plans
- Administer or score tests
- Develop formal course curricula, plans of instruction (POIs), or specialty training standards (STSs)
- Evaluate progress of trainees
- Develop training materials or aids
- Develop performance tests
- Write test questions
- Counsel trainees on training progress
- Inspect training materials or aids for operation or suitability
- Complete student entry or withdrawal forms

Eighty-one percent of these members hold a 5-skill level and 19 percent the 7-skill level. The average time in the career ladder for these AD airmen is almost 10½ years, with 11½ years in service. The predominant paygrade of this job is E-6 (Table 4).

Comparison to Previous Study

Table 5 lists the jobs and clusters identified in this report and compares them to the jobs and clusters of the 1994 report. Five of the six jobs identified in the previous report matched similar jobs in this report. The only exception was the Tool Crib Job from the previous survey not being identified as a specific job within this report.

The UAV job identified in this report was not identified in the 1994 report.

These differences affect a very small percentage of the survey respondents and therefore have little effect on the career ladder structure.

TABLE 3

RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS

DUTIES		Flightline Maint Cluster (ST086) (N=1,544)	Shop Maint Cluster (ST030) (N=158)	UAV Maint Job (ST373) (N=52)	Mgmt Cluster (ST053) (N=209)	Quality Assurance Job (ST247) (N=14)	Instructor Job (ST336) (N=16)
A	PERFORMING GENERAL GUIDANCE AND CONTROL SYSTEMS ACTIVITIES	7	30	8	4	2	3
B	MAINTAINING FLIGHT INSTRUMENT SYSTEMS	28	17	8	2	19	5
C	MAINTAINING ENGINE INSTRUMENT SYSTEMS	14	4	4	1	12	2
D	MAINTAINING FLIGHT DIRECTOR AND NAVIGATION SYSTEMS	9	9	1	1	7	1
E	MAINTAINING FUEL OR LIQUID QUANTITY INDICATING SYSTEMS	6	1	3	*	4	1
F	MAINTAINING POSITION INDICATING SYSTEMS	6	1	4	*	8	*
G	MAINTAINING AUTOMATIC FLIGHT CONTROL SYSTEMS	5	7	*	1	3	*
H	MAINTAINING AUGMENTATION SYSTEMS	1	1	0	*	1	*
I	MAINTAINING COMPASS SYSTEMS	3	3	0	1	2	*
J	MAINTAINING INERTIAL NAVIGATION SYSTEMS (INSs) OR WEAPONS RELEASE COMPUTER SYSTEMS	4	6	1	1	3	*
K	MAINTAINING FIRE CONTROL SYSTEMS	*	*	0	*	1	0
L	MAINTAINING FUEL SAVING ADVISORY OR COCKPIT AVIONICS SYSTEMS	2	2	*	*	1	*
M	MAINTAINING FLIGHT RECORDERS	1	*	1	*	1	0
N	PERFORMING GENERAL AIRCRAFT ACTIVITIES	6	1	60	1	3	2
O	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	1	2	2	8	4	1
P	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	3	4	3	54	18	11
Q	PERFORMING TRAINING ACTIVITIES	2	2	2	12	3	55
R	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM	1	2	*	6	5	4
S	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	7	2	9	2	12

* less than 1 percent

TABLE 4

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	Flightline Maint Cluster (ST086) (N=1,544)	Shop Maint Cluster (ST030) (N=158)	UAV Maint Job (ST373) (N=10)	Mgmt Cluster (ST053) (N=209)	Quality Assurance Job (ST247) (N=14)	Instructor Job (ST336) (N=16)
PERCENT OF SAMPLE	72%	7%	1%	10%	1%	1%
PERCENT IN CONUS	86%	87%	100%	81%	86%	100%
DAFSC DISTRIBUTION:						
2A132	1%	13%	0	0	0	0
2A152	20%	59%	0	9%	7%	6%
2A172	11%	12%	0	23%	21%	0
2A431	15%	3%	40%	0	0	0
2A451	40%	9%	60%	11%	22%	75%
2A471	13%	4%	0	57%	50%	19%
COMPONENT STATUS:						
ACTIVE DUTY	60%	73%	100%	83%	79%	100%
AIR NATIONAL GUARD	20%	7%	0	4%	7%	0
AIR FORCE RESERVE	20%	20%	0	13%	14%	0
PAYGRADE DISTRIBUTION:						
E-1 - E-3	14%	16%	40%	0	0	0
E-4	23%	41%	50%	3%	0	0
E-5	35%	28%	10%	19%	43%	6%
E-6	22%	11%	0	26%	21%	69%
E-7	5%	4%	0	52%	36%	25%
AVERAGE MONTHS IN CAREER FIELD *	90	72	44	177	163	128
AVERAGE MONTHS IN SERVICE *	94	79	53	190	173	138
PERCENT IN FIRST ENLISTMENT (1-48 MOS TAFMS) *	32%	29%	50%	0	0	0
PERCENT SUPERVISING	42%	25%	30%	84%	29%	12%
AVERAGE NUMBER OF TASKS PERFORMED	286	76	50	67	124	47

**Active Duty Only*

TABLE 5

SPECIALTY JOB COMPARISON BETWEEN CURRENT AND 1994 SURVEYS

CURRENT SURVEY (N=2,131)	1994 SURVEY (N=2,323)
I. Flightline Maintenance Cluster	I. Flightline Maintenance Cluster
II. Shop Maintenance Cluster	II. In-Shop Maintenance Cluster
III. Unmanned Aerial Vehicle (UAV) Maintenance Job	*No Similar Job Identified*
IV. Management Cluster	V. Maintenance Administration Cluster VII. Supervisory/Management Job
V. Quality Assurance (QA) Job	III. Quality Assurance (QA) Inspection Job
VI. Instructor Job	VI. Instructor Cluster
No Similar Job Identified	IV. Tool Crib Job

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information may then be used to evaluate how well career ladder documents, such as the AFMAN 36-2108 *Airman Classification,* Specialty Description and the Career Field Education and Training Plan (CFETP), reflect what career ladder personnel are actually doing in the field.

The distribution of skill-level groups across the career ladder jobs and clusters are displayed in Tables 6-8, while Tables 9-11 offer another perspective by displaying the relative percent time spent on each duty across skill-level groups. These tables also reflect the distribution of AD, ANG, and AFRC personnel. A somewhat typical pattern of progression is noted within the AFSC 2A4X1 career ladder. Personnel at the 3- and 5-skill levels work in the technical jobs of the career ladder and spend most of their time on technical tasks. As incumbents move up to the 7-skill level, they begin to perform supervisory tasks, but still spend time performing the technical tasks of the career ladder.

Skill-Level Descriptions

DAFSC 2A431 Representing 8 percent of the survey sample, these 263 AD airmen perform an average of 216 tasks. Eighty-eight percent of this group work in the Flightline Maintenance Cluster (Table 6), with only 2 percent performing in the Shop Maintenance Cluster.

Table 9 reflects the percent time spent on duties by DAFSC 2A431 personnel. At the 3-skill level, their time is concentrated on the technical tasks of duties B and C. Representative tasks performed by these members are listed in Table 12.

DAFSC 2A451 The 729 members of this group account for 23 percent of the survey sample. Eighty-five percent work in the Flightline Maintenance Cluster and 2 percent in the Shop Maintenance Cluster (Table 7). This table also reflects the differences in the job distribution of AD and AFRC members. The AD employs 84 percent of their 5-skill level personnel in the Flightline Maintenance Cluster while the AFRC have 90 percent in the Flightline Maintenance Cluster. This is a slight difference in the employment of the personnel in this DAFSC between the AD and AFRC personnel.

Table 10 provides a comparison of the relative time spent on duties for the AD and AFRC forces at the 5-skill level. This table reflects the AD devote more time to General Aircraft and Administrative tasks compared to their AFRC counterparts who spend more time than the AD performing the Flight Instrument system tasks.

Tables 13-15 list representative tasks performed by these DAFSC 2A451 personnel. Table 16 reflects those tasks which best differentiate the AD 3-skill levels from the 5-skill levels. This table shows the 5-skill levels perform supervisory tasks not performed at the 3-skill level.

Table 17 shows the tasks with the most differences between AD 5-skill levels and their AFRC 5-skill level counterparts. This table clearly shows AD forces performing more General Aircraft tasks than the AFRC members performing more Angle-of-Attack and Central Air Data Computer tasks than the AD.

DAFSC 2A471 These 392 members perform an average of 187 tasks and represent 18 percent of the survey sample. Table 8 shows the highest percentage of members are in the Flightline Maintenance Cluster. It also reflects the AFRC focusing more on the technical job in the Flightline Maintenance Cluster and less in the Management Cluster as their AD counterparts.

Table 11 reflects the percent time spent on duties by DAFSC 2A471 members. The main point of this table is the large amount of time spent by ANG and AFRC members performing the technical tasks of Duties B and C, while the AD is heavily involved in the Supervisory and Management tasks of Duty P.

Representative tasks performed by 7-skill level members are reflected in Tables 18-20. Table 21 reflects tasks which best differentiate between AD 5- and 7-skill levels. This table clearly shows the much higher devotion to management and supervisory tasks at the 7-skill level than the 5-skill level. Table 22 compares the AFRC 5- and 7-skill levels and shows the 7-skill levels performing training and supervisory tasks at a much higher percentage than the 5-skill levels.

Tables 23 reflect the differences between the AD and AFRC members. Both tables show the much heavier involvement in supervisory and management tasks of the AD 7-skill level members than their more technically oriented AFRC counterparts.

Summary

Progression in the Aircraft Guidance and Control Systems career ladder follows a regular pattern of highly technical job focus at the lower skill levels, with a broadening into supervision and management at the 7-skill level. An emphasis is clearly seen performing primarily the core job of Aircraft Guidance and Control at the 5- and 7-skill levels, with some broadening into supervisory functions at the 7-skill level. While AD craftsmen at the 7-skill level begin to shift to supervisory jobs, AFRC members at the 5-and 7- skill levels spend a higher percentage of their time performing technical tasks versus supervisory tasks.

TABLE 6

DISTRIBUTION OF 3-SKILL LEVEL DAFSC GROUP MEMBERS ACROSS SPECIALTY JOBS
(PERCENT RESPONDING)

SPECIALTY JOBS		ACTIVE 2A431 (N=263)
I.	FLIGHTLINE MAINTENANCE CLUSTER	88
II.	SHOP MAINTENANCE CLUSTER	2
III.	UNMANNED AERIAL VEHICLE (UAV) MAINTENANCE JOB	2
IV.	MANAGEMENT CLUSTER	0
V.	QUALITY ASSURANCE JOB	0
VI.	INSTRUCTOR JOB	0
	NOT GROUPED	8

TABLE 7

DISTRIBUTION OF 5-SKILL LEVEL DAFSC GROUP MEMBERS ACROSS SPECIALTY JOBS
(PERCENT RESPONDING)

SPECIALTY JOBS		TOTAL 2A451 (N=729)	ACTIVE 2A451 (N=592)	AFRC 2A451 (N=137)
I.	FLIGHTLINE MAINTENANCE CLUSTER	85	84	90
II.	SHOP MAINTENANCE CLUSTER	2	2	3
III.	UNMANNED AERIAL VEHICLE (UAV) MAINTENANCE JOB	1	1	0
IV.	MANAGEMENT CLUSTER	3	4	1
V.	QUALITY ASSURANCE JOB	1	1	0
VI.	INSTRUCTOR JOB	2	2	0
	NOT GROUPED	6	6	6

TABLE 8

DISTRIBUTION OF 7-SKILL LEVEL DAFSC GROUP MEMBERS ACROSS SPECIALTY JOBS
(PERCENT RESPONDING)

SPECIALTY JOBS		TOTAL 2A471 (N=392)	ACTIVE 2A471 (N=312)	AFRC 2A471 (N=80)
I.	FLIGHTLINE MAINTENANCE CLUSTER	52	47	73
II.	SHOP MAINTENANCE CLUSTER	2	1	3
III.	UNMANNED AERIAL VEHICLE (UAV) MAINTENANCE JOB	0	0	0
IV.	MANAGEMENT CLUSTER	30	34	16
V.	QUALITY ASSURANCE JOB	2	2	0
VI.	INSTRUCTOR JOB	1	1	0
	NOT GROUPED	13	15	8

TABLE 9
RELATIVE PERCENT TIME SPENT ON DUTIES BY 3-SKILL LEVEL DAFSC GROUPS

DUTIES		ACTIVE 2A431 (N=263)
A	PERFORMING GENERAL GUIDANCE AND CONTROL SYSTEMS ACTIVITIES	8
B	MAINTAINING FLIGHT INSTRUMENT SYSTEMS	30
C	MAINTAINING ENGINE INSTRUMENT SYSTEMS	13
D	MAINTAINING FLIGHT DIRECTOR AND NAVIGATION SYSTEMS	9
E	MAINTAINING FUEL OR LIQUID QUANTITY INDICATING SYSTEMS	5
F	MAINTAINING POSITION INDICATING SYSTEMS	7
G	MAINTAINING AUTOMATIC FLIGHT CONTROL SYSTEMS	5
H	MAINTAINING AUGMENTATION SYSTEMS	2
I	MAINTAINING COMPASS SYSTEMS	3
J	MAINTAINING INERTIAL NAVIGATION SYSTEMS (INSs) OR WEAPONS RELEASE COMPUTER SYSTEMS	4
K	MAINTAINING FIRE CONTROL SYSTEMS	*
L	MAINTAINING FUEL SAVING ADVISORY OR COCKPIT AVIONICS SYSTEMS	2
M	MAINTAINING FLIGHT RECORDERS	1
N	PERFORMING GENERAL AIRCRAFT ACTIVITIES	8
O	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	1
P	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	*
Q	PERFORMING TRAINING ACTIVITIES	*
R	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM	*
S	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	2

* less than 1 percent

TABLE 10

RELATIVE PERCENT TIME SPENT ON DUTIES BY 5-SKILL LEVEL DAFSC GROUPS

DUTIES		TOTAL 2A451 (N=729)	ACTIVE 2A451 (N=592)	AFRC 2A451 (N=137)
A	PERFORMING GENERAL GUIDANCE AND CONTROL SYSTEMS ACTIVITIES	7	7	7
B	MAINTAINING FLIGHT INSTRUMENT SYSTEMS	24	22	33
C	MAINTAINING ENGINE INSTRUMENT SYSTEMS	12	12	11
D	MAINTAINING FLIGHT DIRECTOR AND NAVIGATION SYSTEMS	7	7	8
E	MAINTAINING FUEL OR LIQUID QUANTITY INDICATING SYSTEMS	5	5	4
F	MAINTAINING POSITION INDICATING SYSTEMS	6	6	8
G	MAINTAINING AUTOMATIC FLIGHT CONTROL SYSTEMS	5	5	5
H	MAINTAINING AUGMENTATION SYSTEMS	1	1	2
I	MAINTAINING COMPASS SYSTEMS	3	3	3
J	MAINTAINING INERTIAL NAVIGATION SYSTEMS (INSs) OR WEAPONS RELEASE COMPUTER SYSTEMS	4	4	4
K	MAINTAINING FIRE CONTROL SYSTEMS	*	*	*
L	MAINTAINING FUEL SAVING ADVISORY OR COCKPIT AVIONICS SYSTEMS	2	1	3
M	MAINTAINING FLIGHT RECORDERS	1	1	2
N	PERFORMING GENERAL AIRCRAFT ACTIVITIES	8	9	5
O	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	2	2	1
P	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	5	6	1
Q	PERFORMING TRAINING ACTIVITIES	3	4	1
R	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM	2	2	*
S	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	2	3	1

* less than 1 percent

TABLE 11

RELATIVE PERCENT TIME SPENT ON DUTIES BY 7-SKILL LEVEL DAFSC GROUPS

DUTIES		TOTAL 2A471 (N=392)	ACTIVE 2A471 (N=312)	AFRC 2A471 (N=80)
A	PERFORMING GENERAL GUIDANCE AND CONTROL SYSTEMS ACTIVITIES	6	5	7
B	MAINTAINING FLIGHT INSTRUMENT SYSTEMS	16	13	26
C	MAINTAINING ENGINE INSTRUMENT SYSTEMS	8	7	10
D	MAINTAINING FLIGHT DIRECTOR AND NAVIGATION SYSTEMS	5	4	7
E	MAINTAINING FUEL OR LIQUID QUANTITY INDICATING SYSTEMS	3	3	3
F	MAINTAINING POSITION INDICATING SYSTEMS	4	3	7
G	MAINTAINING AUTOMATIC FLIGHT CONTROL SYSTEMS	3	3	4
H	MAINTAINING AUGMENTATION SYSTEMS	1	1	2
I	MAINTAINING COMPASS SYSTEMS	2	2	2
J	MAINTAINING INERTIAL NAVIGATION SYSTEMS (INSs) OR WEAPONS RELEASE COMPUTER SYSTEMS	2	2	3
K	MAINTAINING FIRE CONTROL SYSTEMS	*	*	1
L	MAINTAINING FUEL SAVING ADVISORY OR COCKPIT AVIONICS SYSTEMS	1	1	2
M	MAINTAINING FLIGHT RECORDERS	1	1	1
N	PERFORMING GENERAL AIRCRAFT ACTIVITIES	5	4	3
O	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	5	5	3
P	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	28	32	12
Q	PERFORMING TRAINING ACTIVITIES	7	8	3
R	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM	3	3	2
S	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	4	4	3

* less than 1 percent

TABLE 12

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 2A431 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=263)
A0015	Perform safety wire procedures	93
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	89
A0004	Crimp electrical connections	89
A0027	Repair electrical wiring	85
B0141	Perform operational checks of airspeed indicators	84
B0184	Remove or install pitot-static system lines, hoses, or fittings	84
B0169	Remove or install airspeed indicators	83
B0142	Perform operational checks of altimeters	82
B0170	Remove or install altimeters	82
B0140	Perform operational checks of airspeed indicating systems	81
A0001	Apply range marks or slippage marks	80
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	79
B0258	Troubleshoot pitot-static system lines, hoses, or fittings	78
A0025	Repair crimped pin connectors	78
B0123	Inspect pitot-static system lines, hoses, or fittings	77
N1316	Participate as tow team member or supervisor	76
B0097	Inspect airspeed indicators	74
F0768	Perform operational checks of flap position indicating systems	74
B0160	Perform operational checks of true airspeed indicators	73
B0096	Inspect airspeed indicating systems	72
A0031	Solder or desolder electrical components	72
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	71
B0159	Perform operational checks of true airspeed indicating systems	71
B0163	Perform operational checks of VVIs	71
B0136	Perform operational checks of air data computers	70
B0083	Fault isolate pitot-static system lines, hoses, or fittings	70
B0098	Inspect altimeters	70
B0187	Remove or install true airspeed indicators	70
B0164	Remove or install accelerometers	69
B0240	Troubleshoot airspeed indicating systems	68
B0190	Remove or install VVIs	68
A0010	Inspect test equipment	67
B0146	Perform operational checks of AOA systems	67
C0391	Remove or install engine fuel flow indicating system LRUs	66
F0820	Troubleshoot flap position indicating systems	66
B0069	Fault isolate airspeed indicators	65
B0135	Perform operational checks of accelerometers	65
B0165	Remove or install air data computers	65
B0128	Inspect true airspeed indicating systems	65
B0265	Troubleshoot VVI systems	65
B0129	Inspect true airspeed indicators	64
F0781	Remove or install flap position indicating system LRUs	64

* Average Number of Tasks Performed - 216

TABLE 13

REPRESENTATIVE TASKS PERFORMED BY ALL 2A451 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=729)
A0004	Crimp electrical connections	86
A0015	Perform safety wire procedures	85
A0031	Solder or desolder electrical components	84
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	83
A0027	Repair electrical wiring	80
A0010	Inspect test equipment	79
A0025	Repair crimped pin connectors	77
A0001	Apply range marks or slippage marks	75
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	74
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	74
A0013	Perform corrosion control procedures	73
B0142	Perform operational checks of altimeters	71
B0097	Inspect airspeed indicators	71
B0098	Inspect altimeters	70
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	69
B0043	Bench check airspeed indicators	69
B0141	Perform operational checks of airspeed indicators	69
B0044	Bench check altimeters	67
B0123	Inspect pitot-static system lines, hoses, or fittings	67
A0024	Repair coaxial cables or connectors	67
B0140	Perform operational checks of airspeed indicating systems	66
B0184	Remove or install pitot-static system lines, hoses, or fittings	66
B0170	Remove or install altimeters	66
B0169	Remove or install airspeed indicators	65
B0258	Troubleshoot pitot-static system lines, hoses, or fittings	64
B0096	Inspect airspeed indicating systems	62
A0005	Fabricate coaxial or triaxial cables	59
B0129	Inspect true airspeed indicators	59
B0083	Fault isolate pitot-static system lines, hoses, or fittings	58
B0160	Perform operational checks of true airspeed indicators	58
B0159	Perform operational checks of true airspeed indicating systems	58
B0187	Remove or install true airspeed indicators	58
A0017	Pot electrical connections	57
B0091	Inspect air data computers	57
B0128	Inspect true airspeed indicating systems	57
B0240	Troubleshoot airspeed indicating systems	56
A0003	Calibrate torque-indicating devices or tools	54
B0136	Perform operational checks of air data computers	54
B0133	Inspect VVIs	54
B0069	Fault isolate airspeed indicators	54
C0280	Bench check engine tachometer indicating system LRUs	53
A0033	Troubleshoot test equipment	52
B0070	Fault isolate altimeters	52

* Average Number of Tasks Performed - 247

TABLE 14

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 2A451 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=592)
A0015	Perform safety wire procedures	86
A0004	Crimp electrical connections	85
A0027	Repair electrical wiring	83
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	80
B0142	Perform operational checks of altimeters	80
B0141	Perform operational checks of airspeed indicators	80
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	79
A0025	Repair crimped pin connectors	79
A0001	Apply range marks or slippage marks	79
B0184	Remove or install pitot-static system lines, hoses, or fittings	78
B0140	Perform operational checks of airspeed indicating systems	77
B0170	Remove or install altimeters	77
B0169	Remove or install airspeed indicators	77
N1316	Participate as tow team member or supervisor	76
A0031	Solder or desolder electrical components	74
B0123	Inspect pitot-static system lines, hoses, or fittings	74
B0258	Troubleshoot pitot-static system lines, hoses, or fittings	74
B0098	Inspect altimeters	73
B0097	Inspect airspeed indicators	73
B0096	Inspect airspeed indicating systems	72
B0240	Troubleshoot airspeed indicating systems	70
C0460	Troubleshoot engine fuel flow indicating systems	70
C0391	Remove or install engine fuel flow indicating system LRUs	69
A0024	Repair coaxial cables or connectors	67
B0163	Perform operational checks of VVIs	67
N1312	Launch or recover aircraft	65
N1332	Position or remove aircraft chocks	65
A0013	Perform corrosion control procedures	65
B0083	Fault isolate pitot-static system lines, hoses, or fittings	65
C0366	Perform operational checks of engine fuel flow indicating systems	65
B0190	Remove or install VVIs	65
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	64
B0070	Fault isolate altimeters	64
B0069	Fault isolate airspeed indicators	64
C0466	Troubleshoot engine tachometer indicating systems	64
B0159	Perform operational checks of true airspeed indicating systems	64
F0768	Perform operational checks of flap position indicating systems	64
A0010	Inspect test equipment	63
B0160	Perform operational checks of true airspeed indicators	63
C0322	Inspect engine fuel flow indicating systems	63
C0397	Remove or install engine tachometer indicating system LRUs	62
N1314	Marshall aircraft	61

* Average Number of Tasks Performed - 240

TABLE 15

REPRESENTATIVE TASKS PERFORMED BY AFRC 2A451 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=137)
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	89
B0140	Perform operational checks of airspeed indicating systems	88
A0015	Perform safety wire procedures	87
A0004	Crimp electrical connections	86
B0142	Perform operational checks of altimeters	85
B0141	Perform operational checks of airspeed indicators	85
A0001	Apply range marks or slippage marks	84
B0146	Perform operational checks of AOA systems	84
A0027	Repair electrical wiring	83
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	82
B0184	Remove or install pitot-static system lines, hoses, or fittings	82
B0170	Remove or install altimeters	82
B0258	Troubleshoot pitot-static system lines, hoses, or fittings	82
B0169	Remove or install airspeed indicators	82
B0096	Inspect airspeed indicating systems	81
A0025	Repair crimped pin connectors	81
B0240	Troubleshoot airspeed indicating systems	81
B0123	Inspect pitot-static system lines, hoses, or fittings	80
B0097	Inspect airspeed indicators	79
B0247	Troubleshoot AOA systems	78
B0098	Inspect altimeters	77
B0136	Perform operational checks of air data computers	76
B0165	Remove or install air data computers	74
B0083	Fault isolate pitot-static system lines, hoses, or fittings	74
B0091	Inspect air data computers	74
B0159	Perform operational checks of true airspeed indicating systems	74
B0106	Inspect AOA systems	74
F0768	Perform operational checks of flap position indicating systems	74
A0031	Solder or desolder electrical components	72
B0069	Fault isolate airspeed indicators	72
B0244	Troubleshoot altitude indicating systems	72
B0174	Remove or install AOA system LRUs	72
B0187	Remove or install true airspeed indicators	72
B0261	Troubleshoot true airspeed indicating systems	72
B0160	Perform operational checks of true airspeed indicators	71
B0105	Inspect AOA system LRUs	71
B0070	Fault isolate altimeters	70
B0128	Inspect true airspeed indicating systems	70
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	69
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	69
B0158	Perform operational checks of stall warning systems	69
C0366	Perform operational checks of engine fuel flow indicating systems	69
F0820	Troubleshoot flap position indicating systems	69

* Average Number of Tasks Performed - 276

TABLE 16

TASKS WHICH BEST DIFFERENTIATE BETWEEN
ACTIVE DUTY DAFSCs 2A431 AND 2A451 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		ACTIVE DAFSC 2A431 (N=263)	ACTIVE DAFSC 2A451 (N=592)	DIFF
Q1470	Conduct OJT	8.37	55.52	-47.15
O1369	Clear Red-X conditions	2.28	39.22	-36.94
Q1481	Evaluate progress of trainees	3.04	39.73	-36.69
Q1475	Counsel trainees on training progress	1.90	37.69	-35.79
Q1485	Maintain training records or files	9.13	42.78	-33.66
P1398	Counsel subordinates concerning personal matters	1.14	34.80	-33.66
P1441	Inspect personnel for compliance with military standards	4.56	37.52	-32.96
P1458	Supervise military personnel	1.90	34.63	-32.73
P1401	Determine or establish work assignments or priorities	2.66	34.30	-31.63
P1396	Conduct supervisory performance feedback sessions	.76	30.56	-29.80
P1461	Write performance reports or supervisory appraisals	1.14	30.90	-29.76
Q1480	Evaluate personnel to determine training needs	1.90	29.71	-27.81
P1431	Evaluate personnel for compliance with performance standards	.76	26.15	-25.39
O1376	Initiate technical order improvement reports	13.69	37.01	-23.32
N1298	Assist in aircraft engine removals or installations	23.57	46.35	-22.78
O1379	Perform time compliance technical order (TCTO) inspections	23.19	45.16	-21.97
P1445	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	1.90	22.92	-21.02
S1524	Evaluate serviceability of equipment, tools, parts, or supplies	25.10	45.84	-20.75
P1393	Conduct self-inspections or self-assessments	3.80	23.94	-20.14

TABLE 17

TASKS WHICH BEST DIFFERENTIATE BETWEEN
ACTIVE DUTY AND AFRC DAFSC 2A451 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		ACTIVE DAFSC 2A451 (N=592)	AFRC DAFSC 2A451 (N=137)	DIFF
N1298	Assist in aircraft engine removals or installations	46.35	19.71	26.64
D0554	Perform operational checks of periscopic sextants	38.20	19.71	18.49
N1311	Jack or level aircraft	60.27	35.77	24.51
P1441	Inspect personnel for compliance with military standards	37.52	13.14	24.38
P1461	Write performance reports or supervisory appraisals	30.90	6.57	24.33
P1398	Counsel subordinates concerning personal matters	34.80	10.95	23.86
P1396	Conduct supervisory performance feedback sessions	30.56	8.03	22.53
I1038	Troubleshoot C-12 compass systems	26.15	5.84	20.31
N1316	Participate as tow team member or supervisor	76.40	56.20	20.20
C0410	Remove or install torque indicating system LRUs	22.75	2.92	19.83
C0479	Troubleshoot torque indicating systems	23.09	3.65	19.44
C0385	Perform operational checks of torque indicating	22.41	3.65	18.76
B0100	Inspect altitude alert systems	19.69	50.36	-30.67
B0105	Inspect AOA system LRUs	39.90	70.80	-30.90
B0106	Inspect AOA systems	45.84	74.45	-28.61
B0112	Inspect digital CADC system LRUs	30.05	58.39	-28.34
B0113	Inspect digital CADC systems	31.24	59.12	-27.88
B0132	Inspect vertical scale instrument systems	24.62	52.55	-27.94
B0143	Perform operational checks of altitude alert systems	23.77	53.28	-29.52
B0146	Perform operational checks of AOA systems	50.93	83.94	-33.01
B0243	Troubleshoot altitude alert systems	21.22	51.09	-29.87
B0245	Troubleshoot altitude reporting systems	15.11	45.99	-30.88
B0247	Troubleshoot AOA systems	41.77	78.10	-36.34
B0251	Troubleshoot digital CADC systems	32.09	61.31	-29.23

TABLE 18

REPRESENTATIVE TASKS PERFORMED BY ALL 2A471 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=392)
P1441	Inspect personnel for compliance with military standards	71
P1458	Supervise military personnel	69
P1401	Determine or establish work assignments or priorities	63
P1396	Conduct supervisory performance feedback sessions	63
P1398	Counsel subordinates concerning personal matters	62
O1369	Clear Red-X conditions	62
P1431	Evaluate personnel for compliance with performance standards	59
P1461	Write performance reports or supervisory appraisals	58
P1445	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	57
A0004	Crimp electrical connections	57
P1462	Write recommendations for awards or decorations	56
A0027	Repair electrical wiring	56
Q1481	Evaluate progress of trainees	55
A0015	Perform safety wire procedures	55
A0025	Repair crimped pin connectors	54
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	53
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	53
P1442	Interpret policies, directives, or procedures for subordinates	52
Q1485	Maintain training records or files	52
Q1475	Counsel trainees on training progress	52
Q1470	Conduct OJT	52
B0123	Inspect pitot-static system lines, hoses, or fittings	52
B0097	Inspect airspeed indicators	51
B0098	Inspect altimeters	50
B0142	Perform operational checks of altimeters	50
A0024	Repair coaxial cables or connectors	49
P1388	Assign personnel to work areas or duty positions	48
P1395	Conduct supervisory orientations for newly assigned personnel	48
N1316	Participate as tow team member or supervisor	48
A0031	Solder or desolder electrical components	48
B0258	Troubleshoot pitot-static system lines, hoses, or fittings	48
P1405	Develop or establish work schedules	47
P1393	Conduct self-inspections or self-assessments	47
Q1480	Evaluate personnel to determine training needs	47
A0010	Inspect test equipment	46
O1376	Initiate technical order improvement reports	45
P1419	Establish performance standards for subordinates	44
P1432	Evaluate personnel for promotion, demotion, reclassification, or special awards	44
S1524	Evaluate serviceability of equipment, tools, parts, or supplies	44
A0013	Perform corrosion control procedures	43
Q1472	Determine training requirements	42
P1456	Schedule work assignments or priorities	41

* Average Number of Tasks Performed - 187

TABLE 19

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY 2A471 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=312)
P1441	Inspect personnel for compliance with military standards	77
P1458	Supervise military personnel	73
P1398	Counsel subordinates concerning personal matters	70
P1396	Conduct supervisory performance feedback sessions	69
P1401	Determine or establish work assignments or priorities	67
P1461	Write performance reports or supervisory appraisals	67
P1462	Write recommendations for awards or decorations	65
P1431	Evaluate personnel for compliance with performance standards	64
O1369	Clear Red-X conditions	64
P1445	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	62
P1442	Interpret policies, directives, or procedures for subordinates	58
Q1481	Evaluate progress of trainees	56
Q1475	Counsel trainees on training progress	54
P1388	Assign personnel to work areas or duty positions	53
Q1485	Maintain training records or files	53
Q1470	Conduct OJT	53
A0004	Crimp electrical connections	53
P1405	Develop or establish work schedules	52
P1395	Conduct supervisory orientations for newly assigned personnel	52
A0015	Perform safety wire procedures	51
A0027	Repair electrical wiring	51
P1393	Conduct self-inspections or self-assessments	50
P1419	Establish performance standards for subordinates	50
Q1480	Evaluate personnel to determine training needs	49
B0123	Inspect pitot-static system lines, hoses, or fittings	49
A0025	Repair crimped pin connectors	49
P1432	Evaluate personnel for promotion, demotion, reclassification, or special awards	48
N1316	Participate as tow team member or supervisor	47
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	47
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	47
P1456	Schedule work assignments or priorities	46
S1524	Evaluate serviceability of equipment, tools, parts, or supplies	46
O1376	Initiate technical order improvement reports	46
A0024	Repair coaxial cables or connectors	46
A0031	Solder or desolder electrical components	46
P1435	Evaluate work schedules	45
P1404	Develop or establish work methods or procedures	45
Q1472	Determine training requirements	45
P1399	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	44
A0010	Inspect test equipment	44

* Average Number of Tasks Performed - 174

TABLE 20

REPRESENTATIVE TASKS PERFORMED BY AFRC 2A471 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=80)
A0027	Repair electrical wiring	75
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	75
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	75
A0004	Crimp electrical connections	73
A0025	Repair crimped pin connectors	73
A0015	Perform safety wire procedures	73
B0169	Remove or install airspeed indicators	70
B0261	Troubleshoot true airspeed indicating systems	69
B0184	Remove or install pitot-static system lines, hoses, or fittings	69
B0142	Perform operational checks of altimeters	68
B0141	Perform operational checks of airspeed indicators	68
B0140	Perform operational checks of airspeed indicating systems	68
F0768	Perform operational checks of flap position indicating systems	68
B0159	Perform operational checks of true airspeed indicating systems	68
B0136	Perform operational checks of air data computers	66
B0187	Remove or install true airspeed indicators	66
B0123	Inspect pitot-static system lines, hoses, or fittings	65
B0240	Troubleshoot airspeed indicating systems	65
B0146	Perform operational checks of AOA systems	65
B0160	Perform operational checks of true airspeed indicators	65
C0460	Troubleshoot engine fuel flow indicating systems	65
B0244	Troubleshoot altitude indicating systems	64
C0366	Perform operational checks of engine fuel flow indicating systems	64
B0083	Fault isolate pitot-static system lines, hoses, or fittings	63
B0096	Inspect airspeed indicating systems	63
B0247	Troubleshoot AOA systems	63
A0024	Repair coaxial cables or connectors	61
A0001	Apply range marks or slippage marks	61
B0170	Remove or install altimeters	61
B0097	Inspect airspeed indicators	61
B0105	Inspect AOA system LRUs	61
B0165	Remove or install air data computers	60
B0106	Inspect AOA systems	60
B0069	Fault isolate airspeed indicators	59
B0129	Inspect true airspeed indicators	59
A0031	Solder or desolder electrical components	58
B0128	Inspect true airspeed indicating systems	58
B0098	Inspect altimeters	58
B0091	Inspect air data computers	56
C0364	Perform operational checks of engine EGT indicating systems	56
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	55
B0070	Fault isolate altimeters	55
P1458	Supervise military personnel	54

* Average Number of Tasks Performed - 239

TABLE 21

TASKS WHICH BEST DIFFERENTIATE BETWEEN
ACTIVE DUTY DAFSCs 2A451 AND 2A471 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		ACTIVE DAFSC 2A451 (N=592)	ACTIVE DAFSC 2A471 (N=312)	DIFF
A0001	Apply range marks or slippage marks	78.95	42.31	36.64
B0141	Perform operational checks of airspeed indicators	79.63	44.23	35.40
A0015	Perform safety wire procedures	86.08	50.96	35.12
B0142	Perform operational checks of altimeters	80.48	45.83	34.64
B0184	Remove or install pitot-static system lines, hoses, or fittings	77.93	43.91	34.02
B0170	Remove or install altimeters	76.74	43.27	33.47
B0163	Perform operational checks of VVIs	67.06	33.65	33.41
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	80.31	47.12	33.19
A0004	Crimp electrical connections	85.06	52.56	32.50
B0140	Perform operational checks of airspeed indicating systems	77.42	45.19	32.23
B0169	Remove or install airspeed indicators	77.25	45.19	32.06
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	79.12	47.12	32.00
P1462	Write recommendations for awards or decorations	20.88	65.38	-44.50
P1441	Inspect personnel for compliance with military standards	37.52	76.92	-39.40
P1445	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	22.92	62.18	-39.26
P1458	Supervise military personnel	34.63	73.40	-38.76
P1396	Conduct supervisory performance feedback sessions	30.56	69.23	-38.67
P1431	Evaluate personnel for compliance with performance standards	26.15	64.42	-38.28
P1442	Interpret policies, directives, or procedures for subordinates	20.54	58.01	-37.47
P1461	Write performance reports or supervisory appraisals	30.90	66.99	-36.09
P1398	Counsel subordinates concerning personal matters	34.80	69.87	-35.07
P1388	Assign personnel to work areas or duty positions	17.83	52.56	-34.74
P1435	Evaluate work schedules	11.04	44.87	-33.84

TABLE 22

TASKS WHICH BEST DIFFERENTIATE BETWEEN
AFRC DAFSCs 2A451 AND 2A471 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		AFRC DAFSC 2A451 (N=137)	AFRC DAFSC 2A471 (N=80)	DIFF
G0830	Adjust automatic flight control systems (AFCSs)	46.72	22.50	24.22
A0011	Load or certify maintenance data recorder cassette cartridges	40.15	16.25	23.90
A0001	Apply range marks or slippage marks	83.94	61.25	22.69
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	68.61	46.25	22.36
N1301	Clean interiors of aircraft	44.53	22.50	22.03
B0075	Fault isolate caster power back system LRUs	30.66	8.75	21.91
A0013	Perform corrosion control procedures	67.88	46.25	21.63
B0113	Inspect digital CADC systems	59.12	37.50	21.62
F0770	Perform operational checks of landing gear position indicating systems	31.39	10.00	21.39
B0132	Inspect vertical scale instrument systems	52.55	31.25	21.30
B0170	Remove or install altimeters	82.48	61.25	21.23
N1328	Perform operational checks of aircraft indicator warning lights	38.69	17.50	21.19
P1458	Supervise military personnel	20.44	53.75	-33.31
P1441	Inspect personnel for compliance with military standards	13.14	46.25	-33.11
P1396	Conduct supervisory performance feedback sessions	8.03	40.00	-31.97
P1431	Evaluate personnel for compliance with performance standards	9.49	38.75	-29.26
O1369	Clear Red-X conditions	27.01	53.75	-26.74
P1432	Evaluate personnel for promotion, demotion, reclassification, or special awards	4.38	30.00	-25.62
P1401	Determine or establish work assignments or priorities	22.63	47.50	-24.87
Q1481	Evaluate progress of trainees	25.55	48.75	-23.20
P1395	Conduct supervisory orientations for newly assigned personnel	13.87	36.25	-22.38
P1445	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	15.33	37.50	-22.17
P1410	Direct training functions	13.14	35.00	-21.86
P1398	Counsel subordinates concerning personal matters	10.95	32.50	-21.55

TABLE 23

TASKS WHICH BEST DIFFERENTIATE BETWEEN
ACTIVE DUTY AND AFRC DAFSC 2A471 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		ACTIVE DAFSC 2A471 (N=312)	AFRC DAFSC 2A471 (N=80)	DIFF
P1462	Write recommendations for awards or decorations	65.38	20.00	45.38
P1461	Write performance reports or supervisory appraisals	66.99	23.75	43.24
P1398	Counsel subordinates concerning personal matters	69.87	32.50	37.37
P1454	Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	41.35	7.50	33.85
P1419	Establish performance standards for subordinates	50.00	18.75	31.25
P1441	Inspect personnel for compliance with military standards	76.92	46.25	30.67
P1442	Interpret policies, directives, or procedures for subordinates	58.01	27.50	30.51
P1396	Conduct supervisory performance feedback sessions	69.23	40.00	29.23
P1435	Evaluate work schedules	44.87	17.50	27.37
P1399	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	44.23	17.50	26.73
P1390	Complete graduate assessment surveys (GASs)	33.65	7.50	26.15
P1391	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	43.27	17.50	25.77
B0247	Troubleshoot AOA systems	24.36	62.50	-38.14
B0146	Perform operational checks of AOA systems	26.92	65.00	-38.08
B0105	Inspect AOA system LRUs	24.36	61.25	-36.89
B0136	Perform operational checks of air data computers	30.45	66.25	-35.80
B0106	Inspect AOA systems	25.96	60.00	-34.04
B0074	Fault isolate AOA system LRUs	21.15	55.00	-33.85
B0165	Remove or install air data computers	26.28	60.00	-33.72
B0174	Remove or install AOA system LRUs	24.04	57.50	-33.46
B0244	Troubleshoot altitude indicating systems	31.09	63.75	-32.66
B0261	Troubleshoot true airspeed indicating systems	36.22	68.75	-32.53
B0260	Troubleshoot stall warning systems	21.47	52.50	-31.03
B0251	Troubleshoot digital CADC systems	17.95	48.75	-30.80

TRAINING ANALYSIS

Occupational survey data are one of many sources of information which can be used to assist in the development of a training program relevant to the needs of personnel in their first enlistment. Factors which may be used in evaluating training include the overall description of the work being performed by first-enlistment personnel and their overall distribution across career ladder jobs, percentages of first-enlistment (1-48 months TAFMS) members performing specific tasks, as well as TE and TD ratings (previously explained in the **SURVEY METHODOLOGY** section).

First-Enlistment Personnel

In this study, there are 322 members in their first-enlistment (1-48 months TAFMS), representing 15 percent of the total survey sample. Figure 2 reflects the distribution of first-enlistment personnel within the career ladder. Eighty-nine percent of these airmen are performing Flightline Maintenance duties compared to 1percent performing Shop Maintenance duties. Table 24 displays the relative percent of time spent on duties by first-enlistment personnel. Reviewing the table, first-enlistment personnel spend 85 percent of their time performing the technical tasks of Duties A-J.

Table 25 lists representative tasks performed by first-enlistment personnel. Most involve the Flight Instrument System tasks of Duty B.

Table 26 reflects the Test Equipment used by active duty first-enlistment respondents

DISTRIBUTION OF 2A4X1 FIRST-ENLISTMENT PERSONNEL ACROSS SPECIALTY JOBS (N = 322)

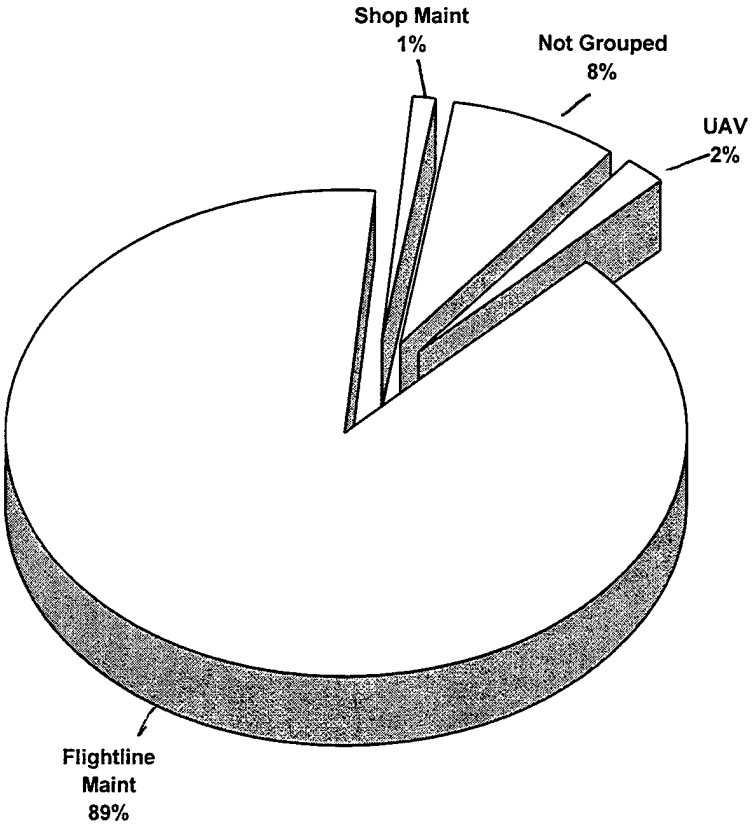

FIGURE 2

TABLE 24

RELATIVE PERCENT TIME SPENT ON DUTIES BY
ACTIVE DUTY FIRST-ENLISTMENT PERSONNEL
(N=322)

	DUTIES	PERCENT TIME SPENT
A	PERFORMING GENERAL GUIDANCE AND CONTROL SYSTEMS ACTIVITIES	8
B	MAINTAINING FLIGHT INSTRUMENT SYSTEMS	29
C	MAINTAINING ENGINE INSTRUMENT SYSTEMS	14
D	MAINTAINING FLIGHT DIRECTOR AND NAVIGATION SYSTEMS	8
E	MAINTAINING FUEL OR LIQUID QUANTITY INDICATING SYSTEMS	5
F	MAINTAINING POSITION INDICATING SYSTEMS	7
G	MAINTAINING AUTOMATIC FLIGHT CONTROL SYSTEMS	5
H	MAINTAINING AUGMENTATION SYSTEMS	2
I	MAINTAINING COMPASS SYSTEMS	3
J	MAINTAINING INERTIAL NAVIGATION SYSTEMS (INSs) OR WEAPONS RELEASE COMPUTER SYSTEMS	4
K	MAINTAINING FIRE CONTROL SYSTEMS	*
L	MAINTAINING FUEL SAVING ADVISORY OR COCKPIT AVIONICS SYSTEMS	1
M	MAINTAINING FLIGHT RECORDERS	1
N	PERFORMING GENERAL AIRCRAFT ACTIVITIES	8
O	PERFORMING MAINTENANCE MANAGEMENT ACTIVITIES	1
P	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	*
Q	PERFORMING TRAINING ACTIVITIES	*
R	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	*
S	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	2

TABLE 25

REPRESENTATIVE TASKS PERFORMED BY AFSC 2A4X1
ACTIVE DUTY FIRST-ENLISTMENT PERSONNEL
(N=322)

TASKS		PERCENT MEMBERS PERFORMING
A0015	Perform safety wire procedures	93
A0004	Crimp electrical connections	90
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	89
A0027	Repair electrical wiring	86
B0141	Perform operational checks of airspeed indicators	86
B0184	Remove or install pitot-static system lines, hoses, or fittings	85
B0142	Perform operational checks of altimeters	84
B0170	Remove or install altimeters	84
B0169	Remove or install airspeed indicators	84
B0140	Perform operational checks of airspeed indicating systems	83
A0001	Apply range marks or slippage marks	82
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	81
A0025	Repair crimped pin connectors	80
B0258	Troubleshoot pitot-static system lines, hoses, or fittings	78
N1316	Participate as tow team member or supervisor	77
B0123	Inspect pitot-static system lines, hoses, or fittings	77
B0097	Inspect airspeed indicators	75
A0031	Solder or desolder electrical components	75
B0096	Inspect airspeed indicating systems	74
F0768	Perform operational checks of flap position indicating systems	74
B0160	Perform operational checks of true airspeed indicators	73
B0083	Fault isolate pitot-static system lines, hoses, or fittings	71
B0159	Perform operational checks of true airspeed indicating systems	71
B0098	Inspect altimeters	71
B0163	Perform operational checks of VVIs	71
B0164	Remove or install accelerometers	71
B0187	Remove or install true airspeed indicators	71
B0240	Troubleshoot airspeed indicating systems	70
B0190	Remove or install VVIs	70
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	69
B0136	Perform operational checks of air data computers	68
B0069	Fault isolate airspeed indicators	68
A0010	Inspect test equipment	67
C0391	Remove or install engine fuel flow indicating system LRUs	67
A0024	Repair coaxial cables or connectors	66
C0460	Troubleshoot engine fuel flow indicating systems	66
B0265	Troubleshoot VVI systems	66
B0135	Perform operational checks of accelerometers	65

* Average Number of Tasks Performed - 217

TABLE 26

TEST EQUIPMENT USED BY ACTIVE DUTY
FIRST-ENLISTMENT AFSC 2A4X1 PERSONNEL

EQUIPMENT	1ST ENL (N=322)
Multimeter, Digital	95
Test Set, TTU-205 Pressure-Temperature	64
Breakout Box	61
Test Set, GTF-6 Capacitance Fuel Quantity	55
Multimeter, Analog	37
Inspection Kit, Pitot Tube	36
Test Set, TTU-27E Tachometer	34
Voltmeter, Digital	32
Compass Calibration Set, MC-1 & MC-1M	32
Test Set, PSD-60 Capacitance Fuel Quantity	26
Compass Calibration Set, MC-2000	26
Flight Data Recorder High-Speed Copy Unit	24
Time Domain Reflectometer (TDR)	21
Magnetic Detector Simulator	20
Tester, Fuel Flow	20
Analyzer, Digital Jet Cal	20

Training Emphasis (TE) and Task Difficulty (TD) Data

TE and TD data are secondary factors that can assist technical school personnel in deciding which tasks should be emphasized in entry-level training. These ratings, based on the judgments of senior career ladder NCOs working at operational units in the field, are collected to provide training personnel with a rank-ordering of those tasks in the JI considered important for first-enlistment personnel, along with a measure of the difficulty of the JI tasks (see high rated tasks presented in Table 27). When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can then be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors, accompanied by moderate to high percentages performing, may warrant resident training. Those tasks receiving high task factor ratings, but low percentages performing, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best omitted from training for first-enlistment personnel, but this decision must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

To assist technical school personnel, AFOMS has developed a computer program that incorporates these secondary factors and the percentage of first-enlistment personnel performing each task to produce an Automated Training Indicator (ATI) for each task. These indicators correspond to training decisions listed and defined in the Training Decision Logic Table found in Attachment 2, AETCI 36-2601, and allows course personnel to quickly focus their attention on those tasks which are most likely to qualify for initial resident course consideration.

TE ratings of 2A4X1 first-enlistment airmen were very low, making this data unacceptable for quantitative analysis.

Table 27 shows TD raters reported performing magnetic surveys of compass rose and performing electrical swings of compass systems to be among the most difficult tasks to learn. However, due to the low numbers of individuals performing these types of tasks, they would be inappropriate for inclusion in a resident curriculum and are more appropriately taught as OJT items.

Various lists of tasks, accompanied by TE and TD ratings, and where appropriate, ATI information, are contained in the TRAINING EXTRACT package and should be reviewed in detail by training school personnel. (For a more detailed explanation of TE and TD ratings, see Task Factor Administration in the **SURVEY METHODOLOGY** section of this report.)

TABLE 27

TASKS RATED HIGHEST IN TASK DIFFICULTY

TASKS		TASK DIFF	PERCENT MEMBERS PERFORMING 2A4X1 1ST JOB (N=104)	2A4X1 1ST ENL (N=322)	2A431 (N=263)	2A451 (N=592)	2A471 (N=312)
I1015	Perform magnetic surveys of compass rose	8.98	6	17	14	27	20
I1014	Perform electrical swings of compass systems	8.81	13	26	24	34	25
I1016	Perform optical transfers of compass transmitters	8.49	2	10	8	22	19
I1002	Index remote compass transmitters of compass systems	8.05	2	7	6	16	12
I1013	Perform compensation adjustments to compass systems	7.96	13	24	22	31	23
D0605	Troubleshoot ABRCSs	7.54	2	1	1	1	0
A0012	Modify test equipment	7.46	7	9	8	12	8
E0699	Troubleshoot AC capacitance fuel quantity indicating systems	7.41	27	35	35	44	30
D0619	Troubleshoot SCNSs	7.40	5	7	6	10	5
A0023	Repair circuit card assemblies	7.38	10	12	14	10	7
G0933	Troubleshoot analog AFCSs	7.38	13	13	12	23	14
E0700	Troubleshoot capacitance liquid quantity indicating systems, other than AC or DC capacitance fuel quantity indicating systems	7.34	5	8	9	8	4
A0002	Calibrate test equipment	7.33	19	19	18	14	12
H0986	Troubleshoot elevator artificial feel systems	7.27	11	14	16	17	10
L1223	Troubleshoot MADAR systems	7.20	10	8	9	13	6
N1363	Tear down or build up helicopters	7.20	2	2	2	5	4
B0206	Repair analog CADC system LRUs	7.20	2	3	3	1	1
E0703	Troubleshoot digital fuel quantity indicating systems	7.19	15	27	29	30	17
D0612	Troubleshoot GAASs	7.19	11	7	8	11	4
J1157	Troubleshoot LASTE systems	7.15	5	5	5	5	2
G0938	Troubleshoot E-4 autopilot systems	7.15	13	17	16	15	11
K1184	Troubleshoot AN/ASM-184 Maverick missile systems	7.14	2	2	3	4	1
B0258	Troubleshoot pitot-static system lines, hoses, or fittings	7.10	67	78	78	74	43
G0940	Troubleshoot hover coupler systems	7.07	1	2	1	5	2
D0608	Troubleshoot AWLSs, other than master caution systems	7.06	5	7	8	13	6

* **Average TD Rating is 5.00**

Specialty Training Standard (STS)

A comprehensive review of STS 2A4X1, dated April 1994, compared STS items to survey data (based on the previously mentioned assistance from subject-matter experts in matching JI tasks to STS elements). STS elements containing general knowledge information, mandatory entries, subject-matter-knowledge-only requirements, or basic supervisory responsibilities were not examined. Task knowledge and performance elements of the STS were compared against the standard set forth in AETCI 36-2601 and AFI 36-2623 (i.e., include tasks performed or knowledge required by 30 percent or more of the personnel in a skill level [criterion group] of the AFS).

Overall, the STS provides comprehensive coverage of the work performed by personnel in this career ladder, with survey data supporting all of the essential elements. Some elements with no performance coding have high percentages of personnel performing matched tasks and should be reviewed by training personnel for possible inclusion in the basic course (Table 28).

Examples of STS elements currently coded with proficiency codes and not supported by survey data are displayed in Table 29. These elements warrant review by training personnel to ensure continued inclusion in the basic course is warranted.

Tasks not referenced to any element of the STS are listed at the end of the STS computer listing. These tasks were reviewed to determine if there were any tasks concentrated around any particular function or job. Most unreferenced tasks are concentrated in the Flight Instrument Systems of Duty B. Those technical tasks performed by 30 percent or more respondents of the STS target groups, but which were not referenced to any STS element, are displayed in Table 30. Training personnel and SMEs should review these unreferenced tasks to determine if inclusion in the STS is justified.

TABLE 28

EXAMPLES OF TECHNICAL TASKS PERFORMED BY AFSC 2A4X1 GROUP MEMBERS SUGGESTED FOR PROFICIENCY CODE REVIEW TO PERFORMANCE CODING (PERCENT MEMBERS PERFORMING)

TASKS		PERCENT MEMBERS PERFORMING 3-SKL LVL (N=263)	5-SKL LVL (N=592)	7-SKL LVL (N=312)	TASK DIFF
19c.	**Flight Control Trim**				
19c(2).	Perform Inspection - - - -				
F0748	Inspect horizontal stabilizer trim position indicating systems	39	27	18	4.33
F0747	Inspect horizontal stabilizer trim position indicating system LRUs	30	21	15	4.22
F0744	Inspect elevator trim position indicating systems	37	30	20	4.44
19c(3).	Perform Operational Check - - - -				
F0765	Perform operational checks of aileron or lateral trim position indicating systems	46	40	21	4.46
F0767	Perform operational checks of elevator trim position indicating systems	47	39	20	4.81
F0769	Perform operational checks of horizontal stabilizer trim position indicating systems	47	32	16	4.61
19c(4).	Troubleshoot - - - -				
F0817	Troubleshoot aileron or lateral trim position indicating systems	37	35	18	5.35
F0819	Troubleshoot elevator trim position indicating systems	39	36	17	5.27
F0821	Troubleshoot horizontal stabilizer trim position indicating systems	40	31	14	5.30
22b.	**Altimeter (Barometric)**				
22b(2)	Perform Inspection - - - -				
B0098	Inspect altimeters	70	72	48	3.20
22b(3)	Perform Operational Check - - - -				
B0142	Perform operational check of altimeters	82	80	46	5.39
22b(4)	Troubleshoot - - - -				
B0242	Troubleshoot altimeters	55	52	29	5.73

* **Average TD Rating is 5.00**

TABLE 29

EXAMPLES OF STS ITEMS NOT SUPPORTED BY ACTIVE DUTY SURVEY DATA
(LESS THAN 20 PERCENT MEMBERS PERFORMING)

TASKS			PERCENT MEMBERS PERFORMING 3-SKL LVL (N=263)	5-SKL LVL (N=592)	7-SKL LVL (N=312)	TASK DIFF
17.	**Stability Augmentation System**					
17b.	Perform Inspection	2b - - -				
H0964	Inspect SAS LRUs		15	16	6	4.42
H0965	Inspect SASs		15	17	7	4.56
17d.	Troubleshoot	2b - - -				
H0990	Troubleshoot SASs		16	18	9	6.59
23b.	**Aims Altimeter System**					
23b(2).	Perform Inspections	2b - - -				
B0101	Inspect altitude reporting system LRUs		16	17	18	3.37
B0102	Inspect altitude reporting systems		17	16	17	3.52
23b43).	Troubleshoot	2b - - -				
B0245	Troubleshoot altitude reporting systems		18	15	13	6.20

* **Average TD Rating is 5.00**

TABLE 30

EXAMPLES OF TECHNICAL TASKS PERFORMED BY 30 PERCENT OR MORE ACITVE DUTY GROUP MEMBERS AND NOT REFERENCED TO THE STS

TASKS		PERCENT MEMBERS PERFORMING 3-SKL LVL (N=263)	5-SKL LVL (N=592)	7-SKL LVL (N=312)	TASK DIFF
B0034	Adjust airspeed indicators	43	41	20	3.49
B0036	Adjust pressure altimeters	45	56	35	3.99
B0037	Adjust vertical velocity indicators (VVIs)	47	50	29	2.78
B0064	Fault isolate accelerometers	49	49	25	3.93
B0065	Fault isolate air data computers	52	47	25	5.70
B0069	Fault isolate airspeed indicators	65	64	37	4.99
B0070	Fault isolate altimeters	62	64	36	5.13
B0074	Fault isolate AOA system LRUs	51	40	21	5.46
B0083	Fault isolate pitot-static system lines, hoses, or fittings	70	65	39	6.21
B0086	Fault isolate true airspeed indicators	54	51	30	5.07
B0089	Fault isolate VVIs	57	56	31	4.71
B0164	Remove or install accelerometers	69	61	34	3.78
B0165	Remove or install air data computers	65	52	26	4.55
B0169	Remove or install airspeed indicators	83	77	45	3.87
B0170	Remove or install altimeters	82	77	43	3.91
B0174	Remove or install AOA system LRUs	56	47	24	4.72
B0183	Remove or install machmeters	49	38	23	3.71
B0184	Remove or install pitot-static system lines, hoses or fittings	84	78	44	5.35
B0186	Remove or install stall warning system LRUs	48	41	22	4.04
B0187	Remove or install true airspeed indicators	70	62	38	4.48
B0190	Remove or install VVIs	68	65	35	3.77
C0296	Fault isolate engine fuel flow indicating system LRUs	53	56	32	5.61
C0302	Fault isolate engine tachometer indicating system LRUs	45	50	29	4.83
C0389	Remove or install engine EGT indicating system LRUs	53	51	29	4.60
C0391	Remove or install engine fuel flow indicating system LRUs	66	69	40	5.27
C0397	Remove or install engine tachometer indicating system LRUs	56	62	37	4.43
D0556	Perform operational checks of rate-of-turn systems	60	61	38	4.23
D0563	Remove or install dual-flight director system LRUs	51	44	22	4.03
D0572	Remove or install rate-of-turn system LRUs	54	58	35	3.85

* **Average TD Rating is 5.00**

JOB SATISFACTION ANALYSIS

An examination of the job satisfaction indicators of various groups can give career ladder managers a better understanding of some of the factors which may affect the job performance of airmen in the career ladder. Attitude questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions were included in the survey booklet to provide indications of job satisfaction.

Table 31 presents job satisfaction data for AFSC 2A4X1 TAFMS groups, together with TAFMS data for a comparative sample of Mission Equipment Management career ladders surveyed in 1997. First- and second-enlistment personnel rate perception of job interest, utilization of talents, and utilization of training higher than the comparative sample. First-enlistment personnel rate accomplishment gained from work higher than the comparative sample while second-enlistment personnel rate accomplishment gained from work equal to or slightly lower than the comparative sample. Career airmen rate all indicators equal to or slightly lower than the comparative sample. Reenlistment intentions for first-enlistment and career airmen are very close to the comparative sample while second-enlistment personnel rate reenlistment intentions much lower than the comparative sample.

An indication of how job satisfaction perceptions have changed over time is provided in Table 32, where again TAFMS data for the current survey respondents are presented, along with data from the last occupational survey report. Reviewing this table, current survey satisfaction ratings for job interest, perceived utilization of talents, perceived utilization of training, sense of accomplishment from work, and reenlistment intentions are rated lower than the previous survey for all TAFMS groups. Reenlistment intentions for all TAFMS groups are much lower than the 1994 survey. There is an alarming decline in reenlistment intentions for the career group, down from 75 percent from the previous survey to only 59 percent in the current survey.

In Table 33, a review of the job satisfaction ratings for the specialty jobs and clusters identified in this survey reveals very low satisfaction ratings for all areas among the Shop Maintenance Cluster and UAV Maintenance Job.

TABLE 31

COMPARISON OF JOB SATISFACTION INDICATORS BY TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	1998 2A4X1 (N=322)	COMP SAMPLE* (N=3,883)	1998 2A4X1 (N=245)	COMP SAMPLE* (N=2,651)	1998 2A4X1 (N=595)	COMP SAMPLE* (N=6,033)
EXPRESSED JOB INTEREST:						
INTERESTING	73.	68	74	65	74	74
SO-SO	21	17	14	20	16	17
DULL	6	15	12	15	10	9
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL TO PERFECTLY	85	72	80	75	83	84
LITTLE OR NOT AT ALL	15	28	20	25	17	16
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL TO PERFECTLY	88	84	86	82	76	80
LITTLE OR NOT AT ALL	12	16	14	18	24	20
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:						
SATISFIED	74	64	66	66	67	72
NEUTRAL	14	17	15	15	14	11
DISSATISFIED	12	19	19	19	19	17
REENLISTMENT INTENTIONS:						
YES, OR PROBABLY YES	51	52	54	66	70	71
NO, OR PROBABLY NO	49	48	46	34	8	8
PLAN TO RETIRE	0	0	0	0	22	21

* Comparative sample of Mission Equipment Management career ladders surveyed in 1997 include the 2A3X2A/B/C, 2A5X3A/B/C, 2A6X3, 2A6X5, 2A7X1, 2A7X3, 2E1X1, 2E8X1, 2MOX2, 2W0X1, AND 2W2X1 AFSCs.

TABLE 32

COMPARISON OF CURRENT SURVEY AND PREVIOUS SURVEY BY TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	1998 2A4X1 (N=322)	1994 455X1 (N=600)	1998 2A4X1 (N=245)	1994 455X1 (N=570)	1998 2A4X1 (N=595)	1994 455X1 (N=1,153)
EXPRESSED JOB INTEREST:						
INTERESTING	73.	85	74	74	74	78
SO-SO	21	10	14	15	16	13
DULL	6	5	12	11	10	9
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL TO PERFECTLY	85	86	80	78	83	80
LITTLE OR NOT AT ALL	15	14	20	22	17	20
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL TO PERFECTLY	88	88	86	76	76	80
LITTLE OR NOT AT ALL	12	12	14	24	24	20
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:						
SATISFIED	74	82	66	73	67	72
NEUTRAL	14	8	15	8	14	10
DISSATISFIED	12	10	19	19	19	18
REENLISTMENT INTENTIONS:						
YES, OR PROBABLY YES	51	65	54	74	70	75
NO, OR PROBABLY NO	49	35	46	26	8	8
PLAN TO RETIRE	0	0	0	0	22	17

TABLE 33

COMPARISON OF JOB SATISFACTION INDICATORS BY ACTIVE DUTY SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

	Flightline Maint Cluster (N=922)	Shop Maint Cluster (N=117)	UAV Maint Job (N=10)	Mgmt Cluster (N=173)	Quality Assurance Job (N=11)	Instructor Job (N=16)
EXPRESSED JOB INTEREST:						
INTERESTING	75	48	40	70	82	94
SO-SO	17	21	20	15	18	6
DULL	8	31	40	15	0	0
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL TO PERFECTLY	84	60	20	78	100	94
LITTLE OR NOT AT ALL	16	40	80	22	0	6
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL TO PERFECTLY	87	65	40	65	91	75
LITTLE OR NOT AT ALL	13	35	60	35	9	25
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:						
SATISFIED	72	43	50	66	73	94
NEUTRAL	14	13	10	13	18	6
DISSATISFIED	14	44	40	21	9	0
REENLISTMENT INTENTIONS:						
YES, OR PROBABLY YES	63	57	60	57	55	88
NO, OR PROBABLY NO	30	42	40	10	18	12
WILL RETIRE	7	1	0	33	27	0

IMPLICATIONS

This survey was initiated to provide current job and task data for use in evaluating the AFMAN 36-2108 *Specialty Description* and appropriate training documents.

Survey results indicate that the present classification structure, as described in the latest specialty description, accurately portrays the jobs performed by members of this career ladder. Career ladder training documents appear, on the whole, to be well supported by survey data, but require review to ensure appropriate proficiency coding.

Job satisfaction ratings are higher than the comparative sample for first- and second-enlistment personnel. Career personnel rate these indicators slightly lower than the comparative sample. Reenlistment intentions are comparable for first-enlistment and career personnel, while second-enlistment personnel rate reenlistment intentions much lower than the comparative sample.

APPENDIX A

SELECTED REPRESENTATIVE TASKS PERFORMED BY SPECIALTY JOB GROUPS

TABLE A1

Flightline Maintenance Cluster

TASKS		PERCENT MEMBERS PERFORMING (N=1,544)
A0015	Perform safety wire procedures	96
A0004	Crimp electrical connections	95
B0134	Perform leak checks of pitot-static system lines, hoses, or fittings	94
B0141	Perform operational checks of airspeed indicators	93
A0027	Repair electrical wiring	92
B0142	Perform operational checks of altimeters	92
B0184	Remove or install pitot-static system lines, hoses, or fittings	92
B0169	Remove or install airspeed indicators	92
B0140	Perform operational checks of airspeed indicating systems	91
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	90
B0170	Remove or install altimeters	90
A0001	Apply range marks or slippage marks	90
B0258	Troubleshoot pitot-static system lines, hoses, or fittings	89
A0025	Repair crimped pin connectors	89
B0123	Inspect pitot-static system lines, hoses, or fittings	87
B0097	Inspect airspeed indicators	86
B0098	Inspect altimeters	85
B0096	Inspect airspeed indicating systems	84
B0240	Troubleshoot airspeed indicating systems	83
A0031	Solder or desolder electrical components	83
B0083	Fault isolate pitot-static system lines, hoses, or fittings	79
B0159	Perform operational checks of true airspeed indicating systems	79
B0187	Remove or install true airspeed indicators	79
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	78
B0160	Perform operational checks of true airspeed indicators	78
C0460	Troubleshoot engine fuel flow indicating systems	78
A0013	Perform corrosion control procedures	76
A0024	Repair coaxial cables or connectors	76
C0391	Remove or install engine fuel flow indicating system LRUs	76
A0010	Inspect test equipment	75
B0069	Fault isolate airspeed indicators	74
B0128	Inspect true airspeed indicating systems	74
B0190	Remove or install VVIs	74
B0261	Troubleshoot true airspeed indicating systems	74
F0768	Perform operational checks of flap position indicating systems	74
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	73
B0163	Perform operational checks of VVIs	73
B0129	Inspect true airspeed indicators	73
C0366	Perform operational checks of engine fuel flow indicating systems	73

TABLE A2

Shop Maintenance Cluster

TASKS		PERCENT MEMBERS PERFORMING (N=158)
A0031	Solder or desolder electrical components	88
A0014	Perform electrostatic discharge sensitive device (ESD) safety procedures	82
A0010	Inspect test equipment	82
A0004	Crimp electrical connections	81
A0027	Repair electrical wiring	77
A0025	Repair crimped pin connectors	70
A0013	Perform corrosion control procedures	65
A0033	Troubleshoot test equipment	65
A0015	Perform safety wire procedures	64
A0019	Remove or install common electrical system components, such as relays, circuit breakers, or switches	61
A0029	Repair test equipment	61
A0024	Repair coaxial cables or connectors	59
A0005	Fabricate coaxial or triaxial cables	58
A0023	Repair circuit card assemblies	55
B0043	Bench check airspeed indicators	54
A0002	Calibrate test equipment	48
S1524	Evaluate serviceability of equipment, tools, parts, or supplies	46
J1095	Load or verify INS computer programs	45
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	44
A0017	Pot electrical connections	44
B0044	Bench check altimeters	43
S1529	Inventory equipment, tools, parts, or supplies	42
B0097	Inspect airspeed indicators	42
B0039	Bench check air data computers	40
A0001	Apply range marks or slippage marks	39
B0062	Bench check VVIs	39
S1536	Store equipment, tools, parts, or supplies	37
B0098	Inspect altimeters	35
L1189	Bench check fuel saving advisory system (FSAS) LRUs	35
J1045	Bench check digital INS LRUs	34
C0273	Bench check engine fuel flow indicating system LRUs	33
S1535	Pick up or deliver equipment, tools, parts, or supplies	32
B0057	Bench check stall warning system LRUs	32
C0278	Bench check engine pressure ratio (EPR) indicating system LRUs	32
A0007	Fabricate multiconductor cables	31
A0011	Load or certify maintenance data recorder cassette cartridges	31
A0028	Repair multiconductor cables	30
S1530	Issue or log turn-ins of equipment, tools, parts, or supplies	30
S1525	Identify and report equipment or supply problems	30
D0486	Bench check AHRS LRUs or AHHS LRUs	30
G0841	Bench check digital AFCS LRUs	30

TABLE A3

Unmanned Aerial Vehicle (UAV) Job

TASKS		PERCENT MEMBERS PERFORMING (N=10)
N1325	Perform preflight, thruflight, or postflight inspections	100
N1299	Assist in aircraft weight and balance functions	100
N1298	Assist in aircraft engine removals or installations	100
N1321	Perform ground engine runs	100
N1311	Jack or level aircraft	100
N1345	Remove or install aircraft wheel and tire assemblies	100
N1332	Position or remove aircraft chocks	90
N1312	Launch or recover aircraft	90
N1320	Perform engine removal preparation procedures	90
N1305	Inspect aircraft landing gear systems	90
A0015	Perform safety wire procedures	90
N1355	Service aircraft tires	90
N1316	Participate as tow team member or supervisor	80
A0016	Perform scheduled inspections, such as isochronal, periodic, or phased	70
N1361	Static ground aircraft	70
N1359	Service engine oil systems	70
B0146	Perform operational checks of AOA systems	70
B0106	Inspect AOA systems	70
N1347	Remove or install landing gear components	70
N1336	Refuel or defuel aircraft using over-the-wing method	60
N1340	Remove or install aircraft doors or panels	60
N1331	Position powered or nonpowered Aerospace Ground Equipment (AGE)	60
N1364	Transport test equipment or units to or from flightline	50
N1342	Remove or install aircraft light lenses, light bulbs, or batteries	50
N1326	Perform supplemental inspections, such as acceptance, calendar, or time replacement item	50
N1314	Marshall aircraft	50
N1338	Remove or install aircraft brake assemblies	50
Q1470	Conduct OJT	50
N1337	Refuel or defuel aircraft using single-point method	40
B0140	Perform operational checks of airspeed indicating systems	40
N1319	Perform end-of-runway inspections	30
N1365	Wash aircraft	20

TABLE A4

Management Cluster

TASKS		PERCENT MEMBERS PERFORMING (N=209)
P1441	Inspect personnel for compliance with military standards	81
P1445	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	80
P1398	Counsel subordinates concerning personal matters	79
P1458	Supervise military personnel	78
P1401	Determine or establish work assignments or priorities	75
P1396	Conduct supervisory performance feedback sessions	74
P1431	Evaluate personnel for compliance with performance standards	72
P1442	Interpret policies, directives, or procedures for subordinates	71
P1461	Write performance reports or supervisory appraisals	70
P1462	Write recommendations for awards or decorations	70
P1393	Conduct self-inspections or self-assessments	68
P1405	Develop or establish work schedules	65
P1391	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	65
P1388	Assign personnel to work areas or duty positions	64
P1395	Conduct supervisory orientations for newly assigned personnel	63
P1392	Conduct safety inspections of equipment or facilities	62
P1432	Evaluate personnel for promotion, demotion, reclassification, or special awards	61
P1456	Schedule work assignments or priorities	60
P1419	Establish performance standards for subordinates	58
Q1485	Maintain training records or files	56
P1404	Develop or establish work methods or procedures	56
P1435	Evaluate work schedules	55
P1399	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	55
P1438	Initiate actions required due to substandard performance of personnel	55
Q1481	Evaluate progress of trainees	54
Q1475	Counsel trainees on training progress	54
P1454	Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	51
Q1480	Evaluate personnel to determine training needs	51
S1524	Evaluate serviceability of equipment, tools, parts, or supplies	50
Q1472	Determine training requirements	48
P1426	Evaluate job-related suggestions	46
P1434	Evaluate safety or security programs	45
P1424	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	45
Q1490	Schedule training	44
P1410	Direct training functions	43
S1525	Identify and report equipment or supply problems	43
P1389	Assign sponsors for newly assigned personnel	43
P1437	Indorse performance reports or supervisory appraisals	42

TABLE A5

Quality Assurance

TASKS		PERCENT MEMBERS PERFORMING (N=14)
B0123	Inspect pitot-static system lines, hoses, or fittings	100
F0745	Inspect flap position indicating system LRUs	100
B0096	Inspect airspeed indicating systems	100
B0097	Inspect airspeed indicators	100
C0332	Inspect engine tachometer indicating system LRUs	100
F0746	Inspect flap position indicating systems	93
B0098	Inspect altimeters	93
C0348	Inspect oil pressure indicating system LRUs	93
B0117	Inspect hydraulic pressure indicating system LRUs	93
C0321	Inspect engine fuel flow indicating system LRUs	93
P1441	Inspect personnel for compliance with military standards	86
A0010	Inspect test equipment	86
P1426	Evaluate job-related suggestions	86
B0091	Inspect air data computers	86
B0128	Inspect true airspeed indicating systems	86
B0129	Inspect true airspeed indicators	86
C0328	Inspect engine oil temperature indicating system LRUs	86
B0094	Inspect air temperature indicating systems	86
B0118	Inspect hydraulic pressure indicating systems	86
B0093	Inspect air temperature indicating system LRUs	86
P1392	Conduct safety inspections of equipment or facilities	79
R1515	Participate in TCTO meetings	79
J1074	Inspect digital INS LRUs	79
C0317	Inspect engine EGT indicating system LRUs	79
R1518	Review TO changes	79
A0008	Inspect aircraft shock mounts	79
B0133	Inspect VVIs	79
C0349	Inspect oil pressure indicating systems	79
C0322	Inspect engine fuel flow indicating systems	79
C0333	Inspect engine tachometer indicating systems	79
P1431	Evaluate personnel for compliance with performance standards	71
P1445	Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting	71
J1075	Inspect digital INSs	71
C0318	Inspect engine EGT indicating systems	71
P1429	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	71
F0743	Inspect elevator trim position indicating system LRUs	71
A0009	Inspect data buses	71
N1305	Inspect aircraft landing gear systems	71
N1304	Inspect aircraft hydraulic systems	71
C0329	Inspect engine oil temperature indicating systems	71
B0095	Inspect aircraft clocks	71

TABLE A6

Instructor Job

TASKS		PERCENT MEMBERS PERFORMING (N=16)
Q1469	Conduct formal course classroom training	100
Q1486	Personalize lesson plans	100
Q1465	Administer or score tests	100
Q1473	Develop formal course curricula, plans of instruction (POIs), or specialty training standards (STSs)	94
Q1481	Evaluate progress of trainees	88
Q1476	Develop training materials or aids	88
Q1474	Develop performance tests	81
Q1491	Write test questions	81
Q1475	Counsel trainees on training progress	81
Q1484	Inspect training materials or aids for operation or suitability	75
Q1468	Complete student entry or withdrawal forms	63
Q1477	Develop training programs, plans, or procedures	63
Q1479	Evaluate effectiveness of training programs, plans, or procedures	63
Q1485	Maintain training records or files	63
S1524	Evaluate serviceability of equipment, tools, parts, or supplies	63
Q1478	Establish or maintain study reference files	56
Q1472	Determine training requirements	56
P1441	Inspect personnel for compliance with military standards	56
Q1480	Evaluate personnel to determine training needs	50
Q1489	Procure training aids, space, or equipment	50
S1529	Inventory equipment, tools, parts, or supplies	50
R1512	Maintain TO libraries	44
S1535	Pick up or deliver equipment, tools, parts, or supplies	38
Q1471	Conduct training conferences, briefings, or debriefings	38
S1536	Store equipment, tools, parts, or supplies	38
Q1470	Conduct OJT	31